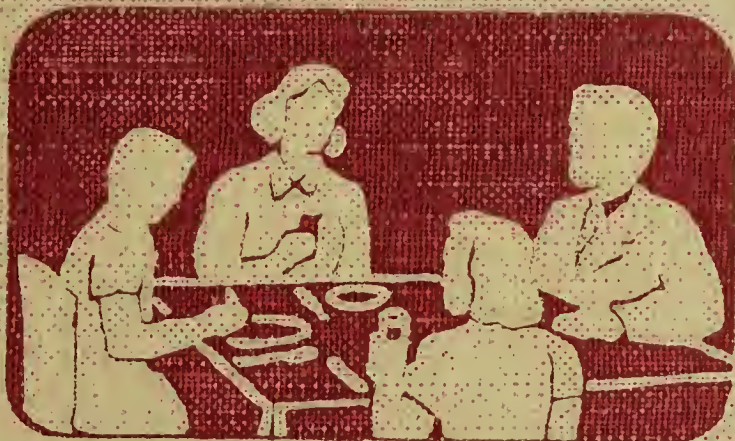
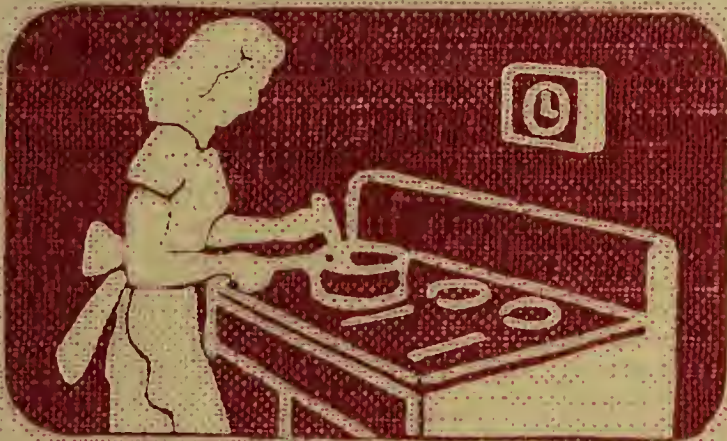


Food for Better Living



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Food For Better Living

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Homemaker

J. B. Lippincott Company

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Preface

Food for Better Living is based on the conviction that the study of food by the high school student should stress the essential relationship between the adequate handling of the food problem in the home and the good family life. The importance of training for better home living in the disturbed social-economic order of the present day can hardly be overemphasized. Any study of food which fails to show how food problems are integrally related to the over-all picture of homemaking is badly out of focus. With this thought always uppermost in their minds, the authors have attempted to write a book which will aid in the education of youth for better home living.

The family food problem is many-sided, including nutrition, menu planning, preparation, clearing away and cleaning jobs, serving, table manners, party food, timesaving and scheduling, consumer buying, the selection and arrangement of equipment, and kitchen planning. The integration of these various topics into well-organized and easily assimilated material that will give the student an all-round grasp of the food problem is not simple. In this book the organization of materials is based on the assumption that beginning students are most interested in specific foods, their purchase, preparation, and nutritive values, rather than in principles of food preparation or nutrition. In other words, the treatment of material in this introductory food book is concrete and objective instead of theoretical and comprehensive.

For example, classes undertake a study of a group of foods such as citrus fruits and tomatoes more readily than an abstract study of vitamin C. When the foods are used as a core about which to accumulate facts, skills, and experiences, the chances are good for effective learning.

Each of the first seven units of study deals with one of the "Basic 7 Food Groups" with which we all became so familiar during the war years. This grouping of foods has proved a good, practical method of helping people to choose a balanced diet. As students progress through the study of each of the seven food groups, they will acquire a simple working knowledge of nutrition, and, at the same time, they will learn to prepare these foods in various attractive dishes, learn simple buying guides, gain experience in serving, and have the opportunity to acquire socially acceptable behavior.

The eighth unit of work, "Your Everyday Meals," is a summation of the first seven units, with added emphasis on the meals for the day. This does not mean that the meal idea is neglected until this point. The meal idea is stressed in the very first project, which is a tomato salad with bread accompaniment, and may be considered a "little meal." By the time students reach the unit on everyday meals, they will already have had many experiences in planning, preparing, and serving meals. This summarizing unit gives them additional experience which makes use of their background gained from previous study.

The ninth unit, "The Meal That Gets Itself," puts special emphasis on saving time and energy. Here, the student is encouraged to think in terms of short cuts, intelligent planning, and laborsaving devices. The tenth unit, "More Food for Less Money," stresses the economic side of the food problem, and the last unit, "Food Makes the Party," deals with food in its relation to the occasions which are the high points in happy, friendly living. Special emphasis is put on the family party and its significance in successful home living.

Each unit includes several class projects, set apart from the text by the use of contrasting type. This series of projects stresses three things: the use of demonstration lessons by the teacher as the most economical and effective method of teaching a new technique; student participation in planning the project; evaluation of results as a means of developing standards for judging food products. When time does not permit use of all the projects, students and teacher together should select those which are most desirable.

Throughout the book every effort is made to approximate the activities of the home kitchen in the school kitchen. All recipes are given in family size. It is suggested that the students work in "family" groups. Sections entitled "Fun with Food at Home" at the end of each problem suggest ideas for carry-over work at home. Many teachers find it desirable to give extra credit for home projects.

The authors wish to express their appreciation to the government agencies and many commercial firms that cooperated so splendidly in supplying illustrative materials.

The authors are deeply indebted to Caroline Foresman, Margaretha Lang, Vera Lehne, and Frances Guy Johnson, members of the home economics teaching staff of the Pittsburgh Public Schools, for using the textbook material in mimeograph form with their classes, and also for their many helpful suggestions and criticisms, which were invaluable in reformulating and reorganizing the material.



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Contents

A PREVIEW OF YOUR FOOD STUDY	3
------------------------------	---

1: THE VITAMIN C FOOD FAMILY	17
------------------------------	----

1. What makes tomato salad good eating?	18
2. Conserving vitamin C for winter	33
3. Citrus fruits for breakfast, lunch, and dinner	44
4. Why is vitamin C important to you?	58

2: HEARTY VEGETABLES AND FRUITS	67
---------------------------------	----

1. How do you like your vegetables: baked, boiled, creamed, or scalloped?	68
2. Vegetable cream soups are good	83
3. Dried beans and peas make hearty dishes	92
4. How is energy supplied by fruits and vegetables?	99

3: CEREALS THREE TIMES A DAY 110

1. Breakfast cereals: to cook or not to cook? 111
2. Hot breads: quick and good! 120
3. Hot off the griddle! 135
4. Main dishes and desserts from the oven 143
5. Yeast breads: bakery and homemade 151
6. The nutritional values in cereals 162

4: MILK: THE ALMOST PERFECT FOOD 169

1. Why is milk the most important of all foods? 170
2. Milk drinks: plain and fancy 173
3. Milk desserts: good to eat and good for you 178
4. Cheese is a milk food 195

5: THE FOOD FATS 208

1. Butter and margarine 209
2. Goodies for the cooky jar 214
3. Cakes with shortening, alias butter cakes 226
4. Pies are popular! 247
5. Foods fried in deep fat 258

6: THE GREEN AND YELLOW FAMILY 269

1. Vitamin A via vegetables 270
2. Vegetable soup: a meal in itself 287

7: THE PROTEIN FOODS	294
1. Why should we eat eggs, meat, fish, and poultry?	295
2. How will you have your eggs?	299
3. Tender ways with not-so-tender meat!	311
4. Treat the tender cuts right!	330
5. Fish for your protein dish	346
6. Chicken for dinner: a tradition	356
 8: YOUR EVERYDAY MEALS	 367
1. Food for the day: the balanced way	368
2. The pattern of your meals	373
3. Setting the table and serving the meal	386
4. Good meals deserve good manners	399
5. Attractive backgrounds for everyday meals	404
 9: THE MEAL THAT GETS ITSELF!	 420
1. Do you work the easy way?	421
2. Simplify your work routine	424
3. Good arrangement speeds the meal	435
4. Choose equipment for saving time and energy	446
 10: MORE FOOD FOR LESS MONEY	 459
1. First aid for buyers!	460
2. Conservation and preservation stretch the food dollar	470
3. Balance them both: diet and budget	482

1. Teas, luncheons, and suppers: formal and informal 489
2. Family dinner parties: with or without company 506
3. Special kinds of parties 523

Appendix I 541

Appendix II 557

Index 567

FOOD FOR BETTER LIVING



National Dairy Council

A Preview of Your Food Study

Why study foods and homemaking? Home is the place where one can find some of the greatest satisfactions in life. It is the place where we eat and sleep, work and play, struggle with the problems of the present, and plan with hope for the future. Truly, it is the very foundation of our existence.

The satisfactions of successful and pleasant home living are based on many things: the physical comfort of soft beds, good meals, and warm rooms; the beauty of a lovely room; an attractive dinner table; a charming garden; the sense of security for the requirements of decent living; and the joy of agreeable companionship with family and friends. This idea of home life is within reach of all who are willing to work at the all-important job of homemaking. In our American way of life, it is possible for everyone who strives intelligently and persistently to attain this idea. A home should be more than a place to hang your hat; it is a place to *live!*

What study could be more important than that of learning how to make a good home? Wherever you live and whatever you do with your life, homemaking is always your job; and the better you do it, the happier you will be. Your home may be a tiny cottage in the mountains, a big house by the seashore, a one-room apartment in a hotel, or a penthouse atop a skyscraper, but the kind of life within it will depend on the people who live there. It is they who create that intangible quality called the "atmosphere of the home."

All who live in homes, both young and old, are homemakers. The wife and mother is generally chief homemaker, but without help from the father and other members of the family she cannot create the good

home life. Every junior member of the family should share in building a successful and happy way of living. Young children can learn that each of them has a responsibility for contributing to the family life. If you are a teen-ager, remember that although you are a junior homemaker today, you will be a chief homemaker in the future. Whether you marry or live alone, you will want to establish the kind of home that pays the biggest dividends in happy living. This will require work and study but surely is no less worth while than other kinds of training. If we study to learn how to earn a living, should we not also study *to learn how to live*? Many thoughtful people feel that the study of homemaking is the finest and most important kind of education in the world.

How food management contributes to happy living. Many of the satisfactions in our home life are connected with daily food. What in life can be greater than buoyant health and vitality? Good food, chosen for the individual dietary needs, will pay big dividends toward a wide and vigorous personal life and contributes greatly to successful family living. A pretty candlelit table for two sets the stage for romance. Certainly the bride in the picture on page 5 has managed to make her dinner table a delightful affair. Mealtimes should be high-light occasions of happy everyday living. Meals eaten under pleasant conditions can mean much in building the better way of life. The dinner table which provides appetizing and wholesome food, served nicely in pleasant surroundings, invites one to eat leisurely and with appreciation. Those who stuff their food in their mouths, gulp it down hurriedly, and dash from the table are missing an opportunity to enjoy an agreeable experience in home living. A good dinner deserves good eating manners, and good manners will make you a more desirable companion at the table.

The everyday dinner table can be appealing to the eye as well as to the appetite. Fresh, crisp salads, steaming hot vegetable and meat platters, and pretty desserts can add considerably to our enjoyment of a meal. A simple centerpiece of garden flowers or a potted plant can give the table a delightful air. Such things as these contribute much to the gracious way of life. Surely, the family in the photograph on page 2 enjoy the meal more because the table is attractive.

Mealtimes are family activities which occur regularly three times a day. Formerly, it was the custom to serve meals in a separate dining room which was not used for any other activity. In order to make better use of space, dining rooms and living rooms have now become one in many modern homes. The frontispiece of this book (the picture oppo-



Ann Pillsbury, Pillsbury Mills, Inc.



Mademoiselle, April, 1947

Top left: Candles, flowers, and glass add glamor to the young homemaker's table. *Top right:* This charming corner of a small apartment is always ready for an impromptu party, as shown below. *Bottom:* A hot-dog party after the movies is quickly arranged by putting the seats and coffee table in front of the fireplace.



Mademoiselle, April, 1947

site the title page) shows a most attractive living-dining room, once a little-used dining room, now a combination room where the family eats, reads, studies, writes, and plays.

Entertaining one's friends is an occasion when food can help to make life more merry. Party refreshments need not be formal or expensive in order to add to the gayety of the affair. A weiner roast before the fireplace may be the jolliest party of the year. The top right and bottom pictures on page 5 show how furnishings can be adapted for fireplace parties. The benches and low table were slid into place for the occasion.

Everyday food is a many-sided problem. Before food reaches the dinner table, the homemaker has dealt with many problems. First, she must plan the menu, and this involves many other problems: nutrition, costs, and family preferences. Next, she must shop for good-quality food for the least expenditure of money. This means that she must know how to keep within her food budget and yet provide an adequate diet. After she has purchased the food, she must prepare it in tasty and appetizing dishes. Finally, she will serve it attractively and make the mealtime a pleasant occasion. Many skills and management abilities are required of the homemaker in dealing with the food problem, and these must be learned. Remember that the good homemaker is made, not born! None of us is naturally endowed with the necessary knowledge and ability to make us efficient, modern homemakers. We must acquire them by study and practice.

In this book we shall become acquainted with the complicated food problem which the homemaker must meet. Our topics will include planning a balanced diet for health and physical efficiency; the selection of good-quality food; buying food economically; storing it properly; efficient methods of work; planning beautiful kitchens and dining rooms; serving everyday food nicely; and planning party food. Truly, the modern homemaker must be a dietitian, cook, purchasing agent, production manager, efficiency expert, and artist all in one. Perhaps that is why homemaking is such an interesting job!

Good nutrition heads the diet. Most important of all is an adequate diet for yourself. Health, vitality, and vigor are the rewards of right eating. Every meal, whether picnic lunch or everyday breakfast, means more than something to please your taste and stop the pangs of hunger. It means topnotch health and the fun of living instead of weakness and dull, monotonous days.

You need not undertake highly scientific research in nutrition in order to learn how to form good food habits. Instead, you can become



Ann Pillsbury, Pillsbury Mills, Inc.

Good food gives us fun, health, and happiness.

acquainted with a simple, practical method of selecting a balanced diet. The Basic 7 Food Groups will help you to form the right eating habits. Each of the first seven chapters in this text deals with one of these food groups. As you study the food values in each group of foods, you will also learn how to prepare and serve them and how to buy them economically.

In the eighth chapter we learn how to plan meals in terms of the seven basic food groups and gain practice in keeping the diet balanced. Other topics discussed in later chapters include quick and easy methods of work, how to get the most value for your food dollar, and food for party occasions.

Organization of classwork. Your food study will include two types of activity: discussion and practical work in the foods laboratory. Both kinds of work are important in learning how to deal with food problems at home. Each unit of work in this book includes both discussion lessons and project work in the school kitchen and at home. Discussions of nutrition, buying, and management problems are especially valuable and should always play an important part in working out all class projects.

1. The first step in any class project is *planning*. Members of the class together with the teacher should plan all details, such as menu, time schedule, and service.

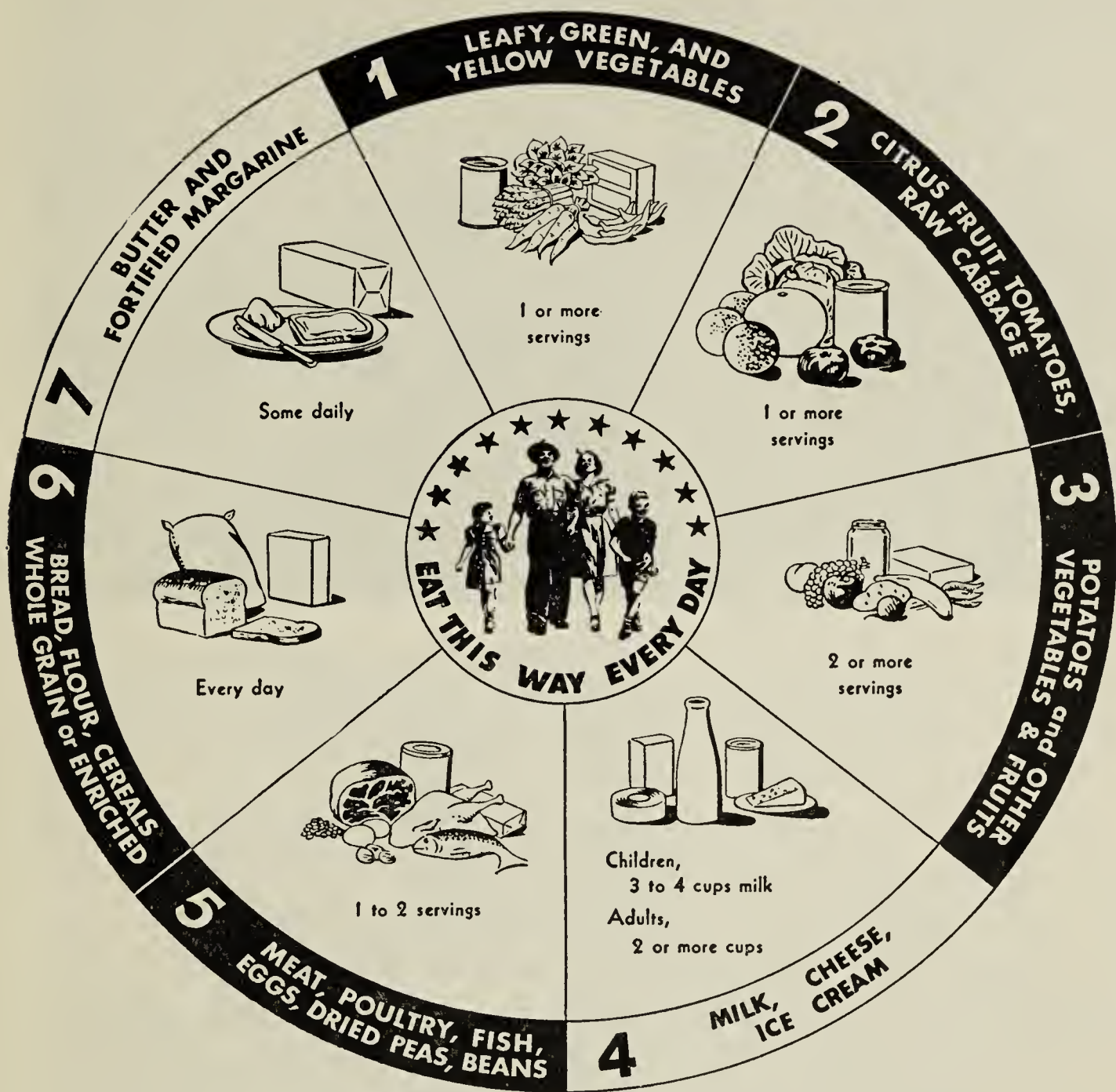
2. Every project should be followed by an evaluation discussion in which the members of the class criticize their own work for good and bad points. Ability to evaluate one's own work is always helpful in becoming a good homemaker.

3. The school food laboratory should be as much like a home kitchen as possible; one can never duplicate the other because in the home only one or two people work in the kitchen at one time, and at school many must work at the same time. Modern school kitchens are divided into unit kitchens, and a group of girls is assigned to each unit.

The picture on page 10 shows how the homemaking rooms in one school are divided into unit kitchens with a combination living-dining room located beyond the sliding doors.

Each group should be given a name or number, and each member of the group should have a number or title. For example, your class might choose to let each group represent a family and choose family names such as the Greens, the Browns, the Whites, the Grays, and so on. Each member of the group would have a title such as mother, father, son, daughter, and as many other relatives as required. From

THE BASIC 7 FOOD GROUPS



U. S. Bureau of Human Nutrition and Home Economics

This chart is your guide to good food, good health, and better living.



Langley High School, Pittsburgh Public Schools

This view of the homemaking rooms in a modern high school is taken from the utility room, which is divided from a kitchen on the right by a food bar. The kitchens (three electric and two gas) are separated from the living room by plastic doors, seen partially closed.

time to time, these titles should be rotated among the group so that each person has a chance to be mother, father, and so on.

Instead of choosing to organize in family groups, you might call the groups A, B, C, D, and so on. Each member of the group will have a number which she keeps throughout the semester. At the beginning of each project, Number Ones, Number Twos, and so forth will each assume definite responsibility. A blackboard assignment which is ready when the class comes into the room is a good way to save time.

4. Every member of the class should cooperate by attending to her responsibilities quickly and efficiently. Know your job and do it as rapidly as possible. Not every girl can do every job, but by rotating groups the girls will have an opportunity to do different jobs. Working together in a school kitchen is different from working alone in a home kitchen. You should learn to do both efficiently.

5. Arrange demonstration lessons for new processes in food preparation with which you are not familiar. The students shown in the picture at the top of page 11 are watching a demonstration of how to use a modern range, which will help them in their projects. Demonstration lessons are valuable because they show processes much better than pictures or printed instructions can show them.



Langley High School, Pittsburgh Public Schools

Top: This class is watching a demonstration of the use of a deep-well and pressure cooker in an electric range. *Bottom:* Neat clothing and attractive tables are of first importance in homemaking.

Your habits of work in the foods laboratory. Everyone should develop good habits of work in the school foods laboratory. Orderliness and cleanliness are the keynotes for efficient work. Each class should make its own rules for good habits of work. The following points should be included in your rules.

1. Decide what kind of aprons are advisable. You may decide to wear white aprons, or you may each choose aprons such as you would wear at home. Aprons protect your clothing from spots and help to protect the food from germs carried in on your clothing.

2. Decide what should be done to keep your hair under control. Some girls wear ribbons around their heads, some wear hairnets, and others wear white bands or caps. The girls shown in the photograph at the bottom of page 11 decided that ribbons or barrettes would keep their hair from getting into the food.

3. Wash your hands before beginning a laboratory lesson. Finger nails should be clean and well manicured.

4. Learn to be orderly about your work. Know where everything is kept, and put everything in its place. Learn where each tool and utensil is kept. Make definite rules about keeping things in order.

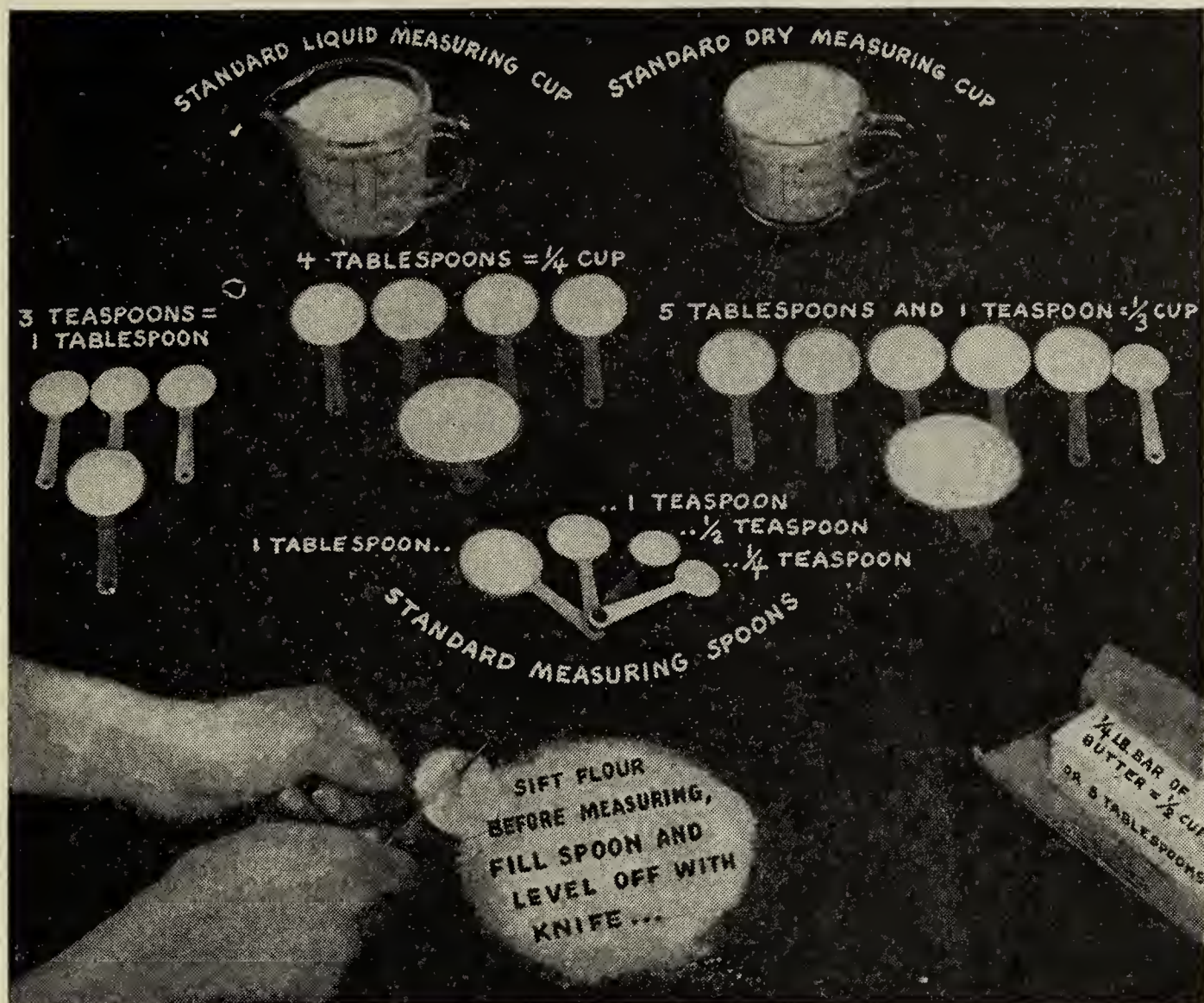
5. Learn to cooperate with others in group work. Group work can be spoiled by one person who does not do her part.

6. Learn to follow directions. Make it your business to obtain definite directions for your work and follow them exactly.

Basic techniques in laboratory work. There are certain procedures which you should be familiar with before undertaking a project in food preparation. For example, you should know how to measure ingredients before you start to make muffins or any other recipe, and you should know how to light the oven before the muffins are ready to bake. You should also understand the relationship of amounts contained in teaspoons, tablespoons, and cups so that you can use recipes more efficiently. Familiarity with abbreviations used in recipes is essential. Remember that t. means teaspoon, T. means tablespoon, c. means cup, and F.G. means a few grains.

1. Always use level measurements. When recipes call for 1 spoonful or 1 cupful of an ingredient, the measurement should be level. The picture opposite shows the correct way of leveling off a spoonful of a dry ingredient—with a knife. The same method should be used for leveling off a cupful of a dry ingredient. Practice this technique before beginning your first project.

2. Learn to use standard measuring spoons and measuring cups. For



Sealtest Laboratory Kitchen

One of the first steps in learning to cook is to learn the correct measuring technique.

measuring liquids, use a cup with a space above the 1-cup line. See the upper left cup in the illustration above. The extra space prevents spilling and avoids the tendency to skimp in measurements.

To measure dry ingredients, use a cup which has the cup line right at the rim. (See the upper right cup in the illustration above.) Fill the container lightly, using a scoop or spoon. Do not shake down. Level off with a knife. Notice the two different styles of measuring cups and the set of measuring spoons in the illustration shown above.

For fractions of a cup, use the lines indicating $\frac{1}{4}$, $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{2}{3}$ on the standard measuring cup; or, if possible, use a set of cups which come in a nest of four: 1 cup, $\frac{1}{2}$ cup, $\frac{1}{4}$ cup, and $\frac{1}{3}$ cup.

3. Learn the multiplication tables for measurements in cooking. This is very useful in using recipes.

$$3 \text{ t.} = 1 \text{ T.}$$

$$2 \text{ T.} = \frac{1}{8} \text{ c.}$$

$$4 \text{ T.} = \frac{1}{4} \text{ c.}$$

$$8 \text{ T.} = \frac{1}{2} \text{ c.}$$

$$16 \text{ T.} = 1 \text{ c.}$$

$$4 \text{ ounces} = \frac{1}{2} \text{ c.}$$

$$8 \text{ ounces} = 1 \text{ c.}$$

$$2 \text{ c.} = 1 \text{ pint}$$

$$2 \text{ pints} = 1 \text{ quart}$$

4. Learn to light the burners on the top of the range and the oven burners. Practice doing this until you can do it safely and correctly without supervision. See the safety rules below for testing burners and for the use of matches.

5. Practice using the heat regulator on the oven.

6. Learn how to use the refrigerator correctly and how to store foods in it.

7. Decide upon a definite routine for washing dishes and tea towels. Discuss the importance of hot, soapy water; hot rinse water; clean tea towels; and washing up as you cook. How might the procedure in washing tea towels differ in a home kitchen from that required in the laboratory?

Safety rules in the kitchen. The need for the practice of safety rules in the kitchen can not be overemphasized. Dreadful accidents resulting in serious injuries and death have occurred in many home kitchens. Study the following safety rules and observe them always, both at home and at school. More than 32,000 deaths were caused by home accidents in 1947, and 17.9 per cent of these occurred in home kitchens. Such an appalling number of deaths makes it obvious that those of us who work in kitchens should practice safety. Read the following rules and try to visualize your own procedures in each case. Can you improve?

1. When you light the oven of a gas range, follow a safe procedure. First, check the pet cocks to make sure they have been turned off tightly. Second, open the oven door and also the broiler door if there is one. Keep your head away from the oven. Third, strike your match, hold it near the burner, and turn on the gas. These three movements should be considered as one because they should be done rapidly one after the other. Practice in lighting ovens is very important.

2. Always turn off the oven burner or top-of-the-range burner as soon as it is no longer needed. Turn the pet cocks off *tightly*.

3. Use kindling wood to start fires in wood or coal ranges; *never use gasoline or kerosene for this purpose*.

4. Use safety matches only; those which will ignite only when they strike on the box are safest.

5. Always strike the match away from you, never toward you.

6. Always close the box before lighting a match. A spark may easily ignite the whole box, causing a dangerous burn.

7. Never throw burned matches into waste baskets or other containers holding inflammable material.

8. Keep matches in the box, never loose upon a shelf or elsewhere.

9. Keep matches away from children.

10. Turn pot handles in, so that they cannot be bumped and upset cooking pans. See the illustration at the right.

11. Use potholders for lifting hot pans. Never use wet clothes, the tail of your apron, tea towel, or towel paper.

12. Pour hot liquids away from you.

13. Wipe up spilled water, grease or fruit peelings immediately. Falls on slippery floors are numerous.

14. If grease in a frying pan catches fire, extinguish the flame with a handful of salt or soda. Or manipulate a lid over the top of the pan. NEVER USE WATER.

15. Keep sharp knives in special compartments so that the hand cannot be cut while fumbling for a spoon, fork, or other implement.

16. Never use a sharp knife so that it cuts toward your hand. Hold the fruit or vegetable so that the knife cannot slip and slash your thumb or the palm of your hand. In slicing, lay the fruit or vegetable on the cutting board and cut downward.

17. Never hand a knife to another person with the blade toward him. Turn the knife so that the person can take hold of the handle.

18. Use a can opener that does not leave a sharp edge on the tin can. Never open a can with a knife.

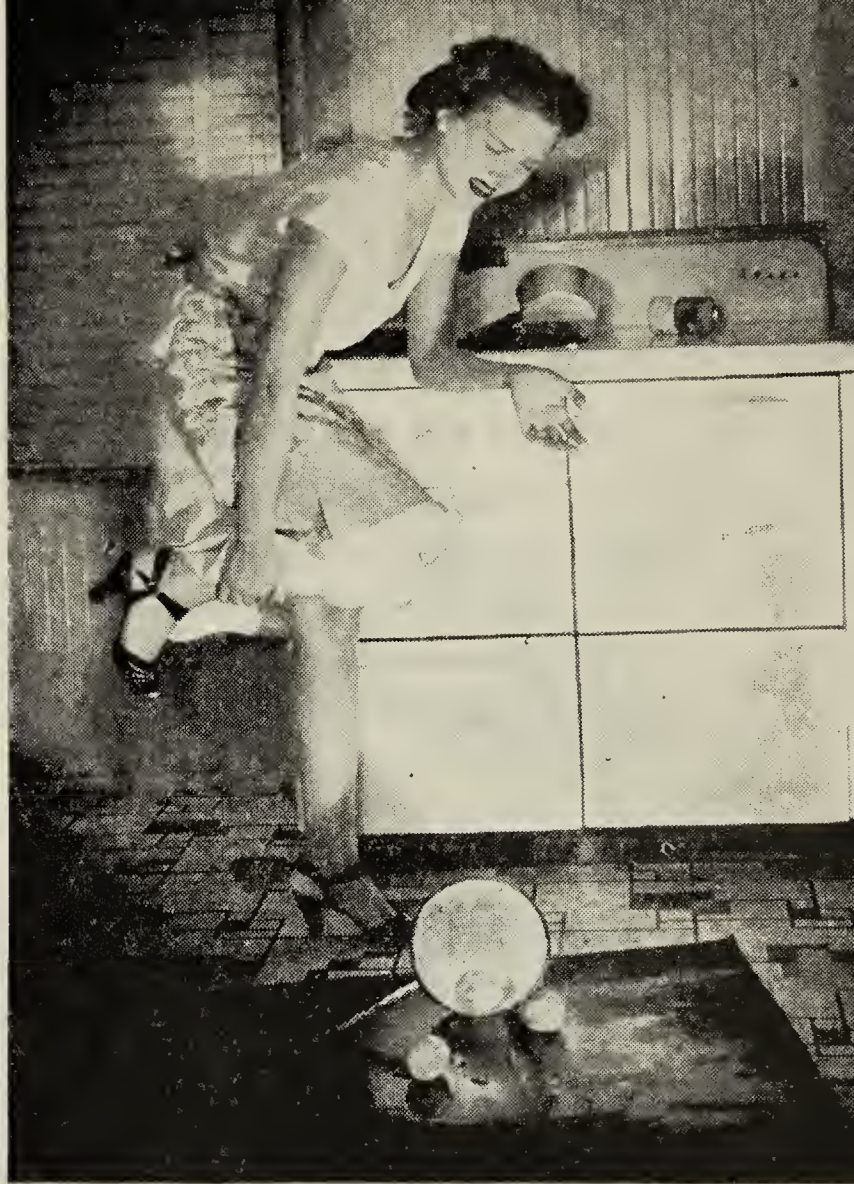
19. Keep knives, electric cords, lyes, ammonia, and other dangerous things away from children.

20. Never touch electric cords or equipment with wet hands. When electrical equipment is in use, keep it out of reach of the sink.

21. Repair frayed or worn electric cords and discard those which cannot be repaired.

22. Never place things on the basement stairs, as this may cause a serious fall.

Practice of these safety rules will help to prevent accidents.

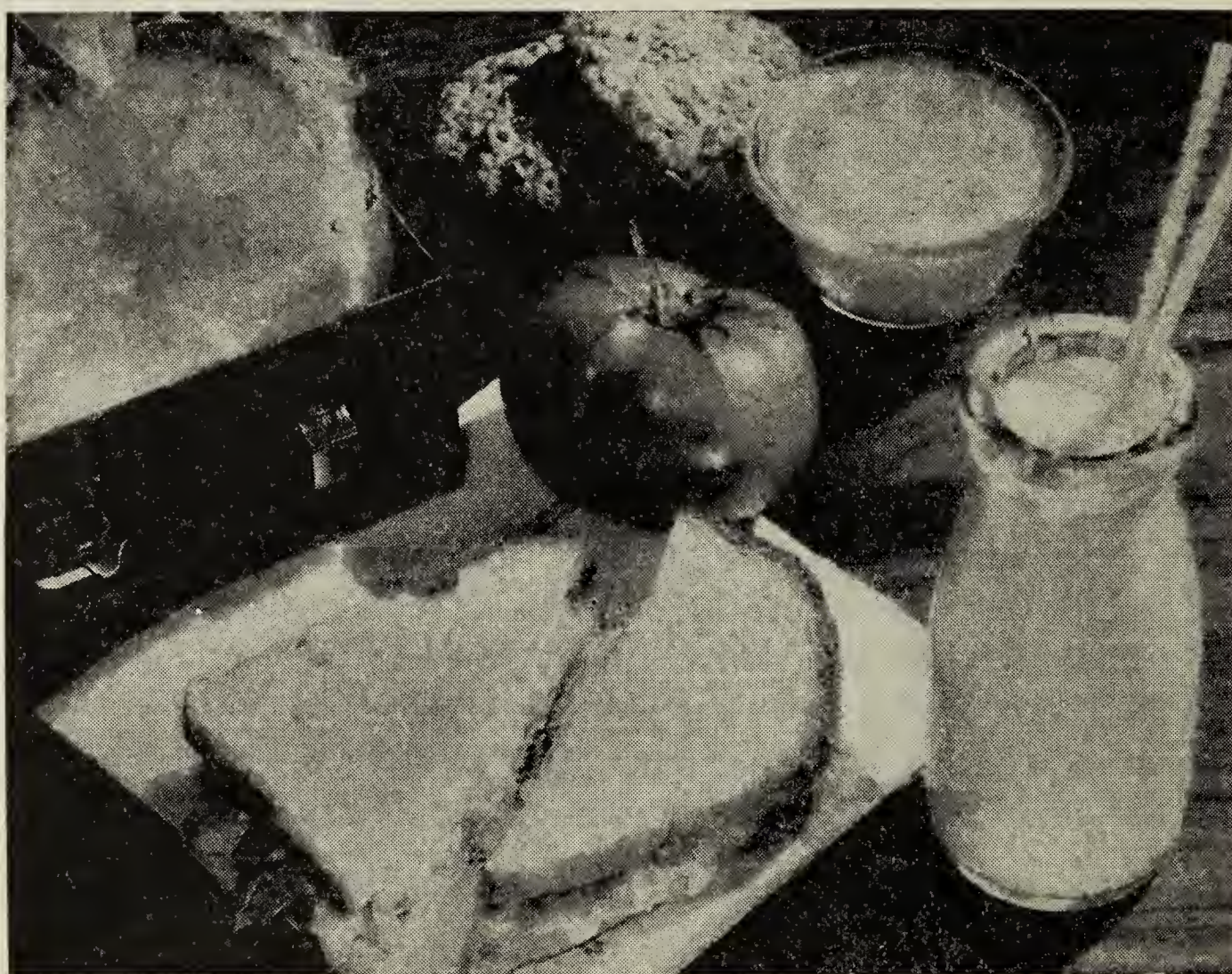


American Mutual Liability Insurance Company

Forethought prevents accidents. Remember to turn pan handles in from the outside of the range.

Credit for home projects. Discuss the possibility of doing home projects as “home work” in your foods course. This means that you would carry out certain projects at home which are related to your study of foods. Your mother, or another adult of your home, would sign a statement of the work you accomplished, and your teacher would give you a certain amount of credit for it. At the end of each unit, you will find home projects suggested under the title, “Fun With Food At Home.”

Planning and packing your school lunch makes an excellent home project for which you might receive credit. The box lunch pictured below contains one of the vitamin C foods that you will study in the next unit.



National Dairy Council

1

The Vitamin C Food Family

As a beginning in our food study we will get acquainted with the vitamin C group of foods, which includes tomatoes, citrus fruits, berries, and leafy greens. These foods are grouped together, not because of any family resemblance in appearance but because each of them contains a hidden nutrient known as vitamin C. The food chart on page 9, showing the seven basic food groups, calls it Group Two, but we shall study it first. If you are beginning this study in September, you will have fresh tomatoes to work with.

The substance known as vitamin C has a chemical name, ascorbic [a-skor'-bik] acid. Although this substance is so well hidden in our food that we cannot see it, it is tremendously powerful in its effect on our health. Without it, we cannot resist certain types of infections; the bones and teeth deteriorate; small blood vessels weaken and break easily; and gums swell and bleed. These things happen in the case of a severe deficiency of vitamin C, but a mild deficiency may also cause illness and fatigue. The weary feeling which we know as spring fever may actually result from a shortage of vitamin C foods in our diet.

Do not think the vitamin C foods in your diet are a duty rather than a pleasure. Fortunately, they are most appetizing and can be used in various ways. Soups, salads, main dishes, and desserts can be made from vitamin C foods. It is fine to know that foods which are so good to eat are also good for us. Nutrition experts recommend *one or more servings from the vitamin C foods every day*.

In this unit of study you will learn which are the vitamin-C-rich foods; how to prepare them; how to select them in the market; and, most important of all, to form the habit of eating them every day.

1. What makes tomato salad good eating?

Fresh tomatoes, red-ripe and full-favored, are delicious to taste and beautiful to see. Sliced and served on green lettuce leaves or combined with other green and yellow vegetables, they make salads which are good to look at and good to eat. However, good salads do not happen by accident. Failure to understand the good points of a salad or carelessness in handling the ingredients generally results in a most unappetizing dish. Good planning and skill are required in the preparation of a nice salad.

Salads for different purposes. Salads are most versatile and can be adapted to various uses. They may be served at the beginning of a meal as an appetizer course or at the end as a dessert. Often, they are used as main dishes for luncheons or suppers and, very frequently, as accompaniments to the meat course of the dinner meal.

An appetizer or cocktail salad should be a small, light salad which will stimulate the appetite and not dull it. Sea food cocktail with a highly seasoned tomato sauce is a popular appetizer. Plain tomato juice or a small tomato aspic salad can also be used as an appetizer before meals.

When salad is used as the main dish for luncheon or supper, it should be a heavier salad than those selected for other purposes in the menu. Tomatoes stuffed with cottage cheese, egg salad, or tuna fish make excellent main dishes. Another substantial salad is made by combining tomatoes with other vegetables and using a rich dressing.

Dinner salads which accompany or follow the meat course should not be heavy or contain high fuel value. A good dinner salad, usually called combination salad, consists of sliced tomatoes, cucumbers, and green peppers served on lettuce or other greens. Or a single whole tomato garnished with water cress may be used.

Good party or dessert salads are made from fruits. Individual molds of tomato aspic combined with tuna fish or chicken salad are also good party refreshments.

When you are planning a salad, think first of the place it will occupy in the menu. Is it to be a main dish, a dessert, an appetizer, or part of the dinner meal?

Selection of tomatoes and salad greens. The preparation of a good salad really begins with the selection of the materials. Pale, half-ripe tomatoes and bedraggled lettuce are not beauty aids and certainly do

not add to the tasty quality of a salad. Choose tomatoes which are fully ripened to the lovely red color which is characteristic of the fruit. The tomatoes should be firm, but not hard, and without soft spots. It is also desirable to have tomatoes of uniform size for use in salads. Avoid misshapen, angular, scarred, ribbed, or blemished tomatoes when making your selection for salads. The imperfect tomatoes can be used advantageously for making juice or soups. Remember that fully ripened tomatoes are very perishable and should be used immediately. Partially ripened tomatoes will ripen within a day or two if kept at comfortable room temperature so, if you do your shopping a few days before you expect to use the tomatoes, choose some which are not yet fully ripe.

Salad greens, lettuce, parsley, water cress, endive, and cabbage should be fresh, succulent, and tender. Avoid greens with yellow or withered leaves, brown spots, and dirt. Salad greens should be all that the name implies, fresh and green.

Whether you make your selection of tomatoes and greens from the produce market or from the supply table in the food laboratory, try to select the best which are available. Even though you pay less money for blemished tomatoes and withered lettuce, it is no real economy if your salad is not attractive and appetizing.

Salad dressings: three kinds with variations. There is an old saying that "Clothes make the man," and this is no less true of a salad.

French dressing (see the recipe and pictures on pages 22 and 23) is made from oil, vinegar, and seasoning. It is the simplest of the dressings and is made without cooking by beating or shaking the ingredients together. This kind of dressing is particularly suitable for a tossed salad of greens, mixed vegetable salad, or acid fruit salads. Variations of French dressing are easily accomplished by adding other ingredients such as strained honey for fresh fruit salads or Bleu cheese for head lettuce salad.

A second type of salad dressing, mayonnaise, is especially good in fish, meat, stuffed tomato, or egg salads. It is a rich dressing made from oil, vinegar, egg, and seasonings, and helps to make a hearty salad. See the recipe on pages 24 and 25.

A third type of dressing, known as cooked salad dressing, is made without oil by cooking the ingredients together as explained in the recipe on pages 26 and 27. This kind of dressing is good on mild fruit salads, vegetable salads, or gelatine salads.

When you plan your salad, plan the right dressing. The selection of the dressing is largely a matter of personal preference, although certain

CLASS PROJECT: TOMATO SALAD WITH BREAD ACCOMPANIMENT.

Plan a tomato salad, dressing for it, and a light accompaniment such as crackers or thin bread-and-butter sandwiches.

1. Read the discussion of salads given in this chapter, and study the directions for making salad dressings and the recipes for different kinds of tomato salads on pages 29 to 31.

2. Watch a demonstration by your teacher of making French dressing, mayonnaise, or cooked salad dressing. Follow the steps as given on pages 22 to 27.

3. Each group in the class may decide to make a different kind of tomato salad and dressing.

4. Make a time schedule for the preparation of your salad. If your class periods are long, you may do the whole project in one day. If your periods are short, plan to crisp and chill the greens and make the dressing one day, and assemble the salad and serve it the next day.

5. Lay a cover for serving the salad. Provide a bread-and-butter plate for the accompaniment unless the salad plate is large enough to hold it conveniently.

6. Hold an evaluation discussion after the salads have been served and eaten. Discuss your success according to the points for a good salad given on page 28.

SAFETY WARNING: Remember to check pet cocks on gas stove.

kinds of dressing seem to blend best with certain salad materials. For example, mayonnaise is better suited to a stuffed tomato salad than to a tossed green salad, and French dressing is better adapted to tossed greens. Choose the dressing with reference to the type of salad as well as to personal preferences.

Points on salad preparation. 1. Greens should be chilled and crisp. Preparation of the salad greens should be done at least two hours before they are needed. Wash them under running water, dry them lightly in a clean towel without crushing, and store them in a tightly covered dish in the refrigerator. Crushed or discolored parts should be removed before chilling.

2. Skin and chill the tomatoes. Stick a fork into the stem end of the tomato, and hold it in boiling water for a few seconds. Fully ripe tomatoes need less time than greener ones. Plunge the tomato immediately into cold water. Use a paring knife to remove the stem and to peel off the skin.



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This is a picture of tomato and cucumber salad, usually called combination salad.

3. Drain sliced tomatoes or fruits. A watery salad is most unattractive and can be avoided by draining juicy or watery ingredients.

4. Any of the salad materials which are not easily cut by a fork should be cut into pieces small enough to be eaten without difficulty.

5. Dressing should be added to the salad in such a way as to enhance the salad. Mixed vegetable salads or cole slaw should have enough dressing to moisten the ingredients and bind them together, but not so much as to make the salad seem wet. Some salads, such as mixed vegetables, are good when marinated. This is accomplished by pouring French dressing over the salad and setting it in the refrigerator for at least an hour. Before serving, any excess dressing should be drained off.

Dressing should not be added to some salads until served. For example, a tomato with a garnish of parsley or water cress should not be covered with dressing before bringing it to the table because the dressing runs off the tomato, leaving it messy in appearance. The dressing should be placed on the lettuce leaf beside the tomato just before it is to be served. In some cases it is better to serve the dressing in a bowl at

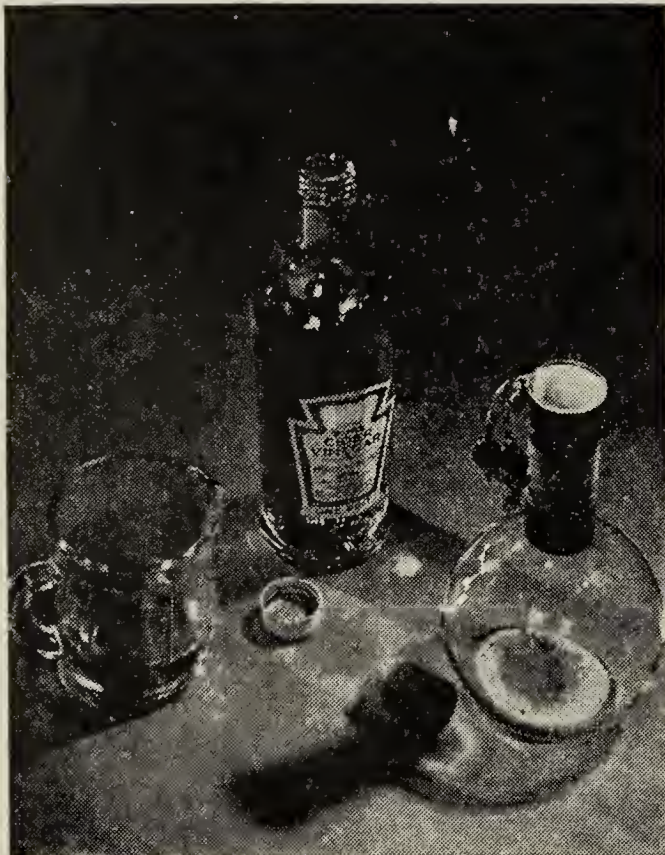
HOW TO MAKE

Ingredients

- 1 $\frac{1}{4}$ t. salt.
- 4 t. sugar
- 1 t. paprika
- $\frac{1}{4}$ t. pepper
- F. G. cayenne pepper
- 1 c. salad oil
- $\frac{1}{4}$ c. vinegar
- 1 bead garlic



1. Combine all dry ingredients in a flask or jar with a tight-fitting lid.

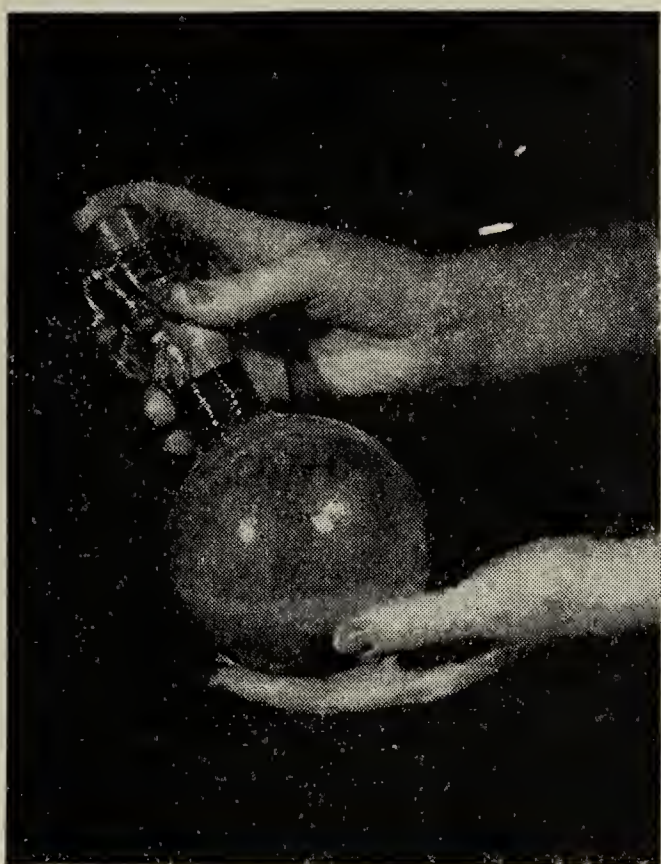


2. Add vinegar to dry ingredients.



3. Add oil to mixture in flask.

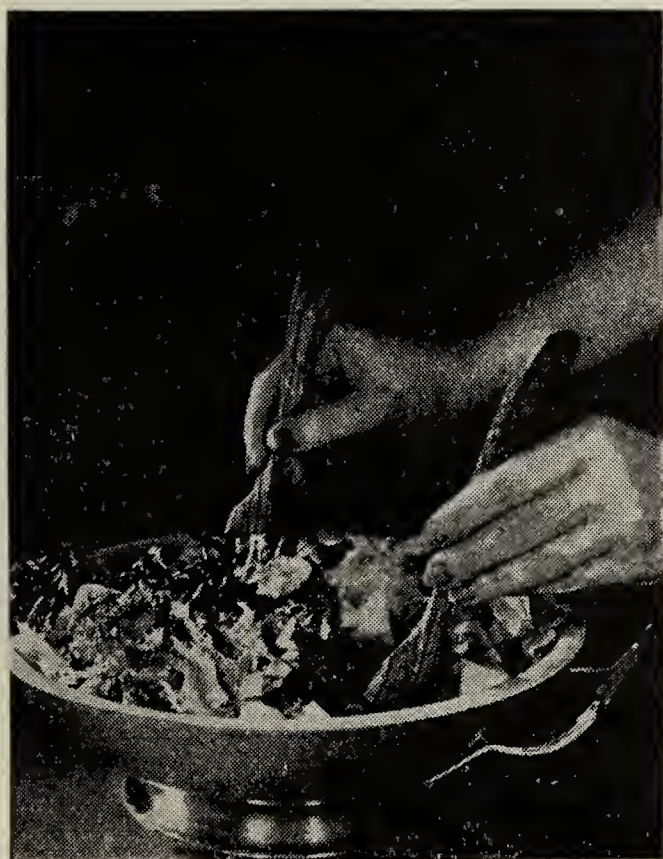
FRENCH DRESSING



4. Shake thoroughly. If desired, add bead of garlic.



5. Chill and shake well before adding to salad. Add only enough dressing to salad greens to glisten the leaves.



Photos from H. J. Heinz Company

6. Toss greens together. Unused dressing should be stored in a cool place.

Variations of French Dressing

Add catsup for Spanish dressing.
Add cream cheese or Roquefort cheese for cheese dressing.

Add chopped parsley, chopped onion, and chopped cooked egg.

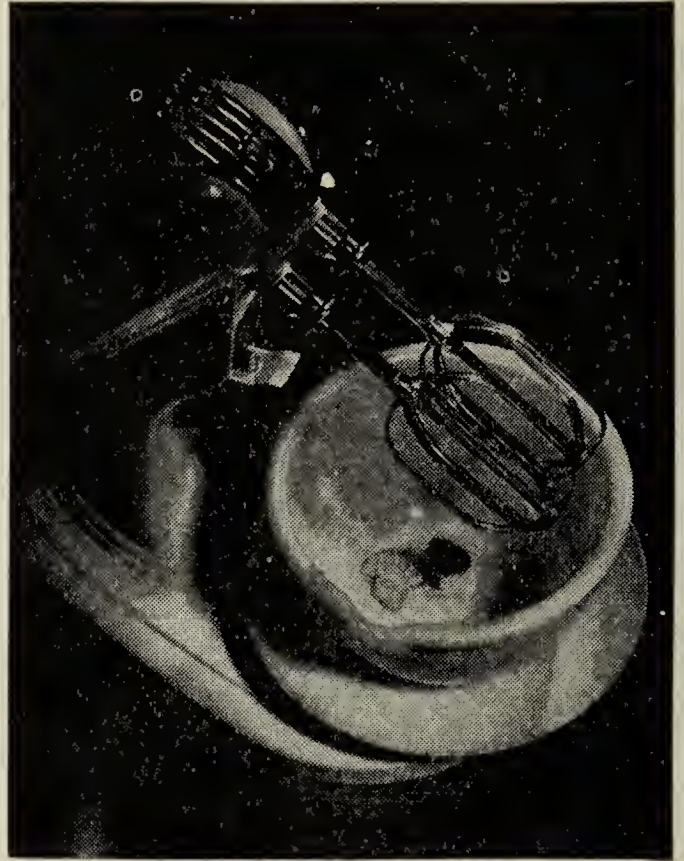
Other variations can be made by using fruit juices, honey, jelly, or horseradish.

Note: Exact proportions for variations of the foundation recipe can be determined by personal preference.

HOW TO MAKE

Ingredients

- $\frac{1}{4}$ t. dry or prepared mustard
- 1 t. salt
- $\frac{1}{2}$ t. sugar
- F. G. cayenne pepper
- 1 egg or 1 egg yolk
- 1 c. salad oil
- 3 T. vinegar or lemon juice



1. Combine dry ingredients and mix thoroughly.

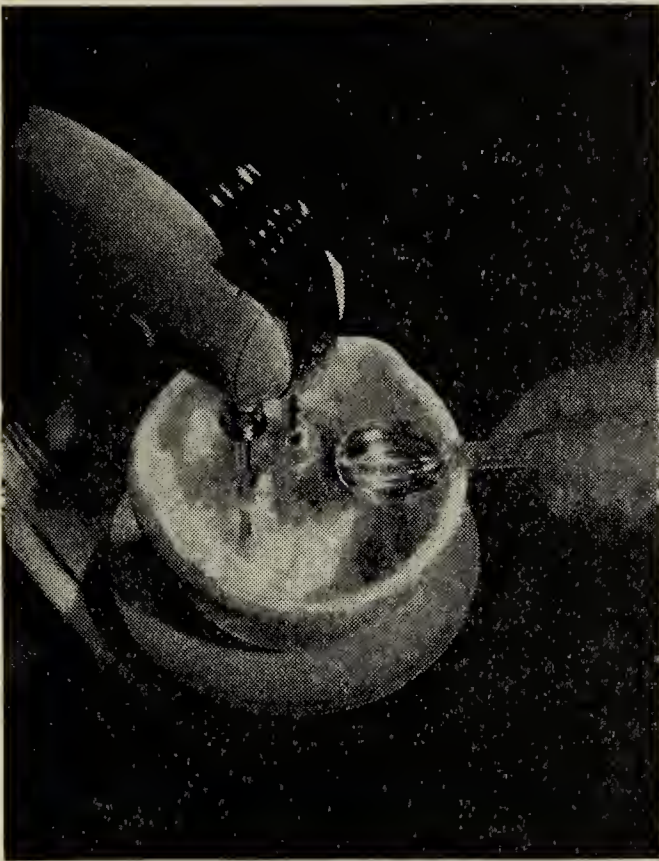


2. Add egg to dry ingredients and beat well.

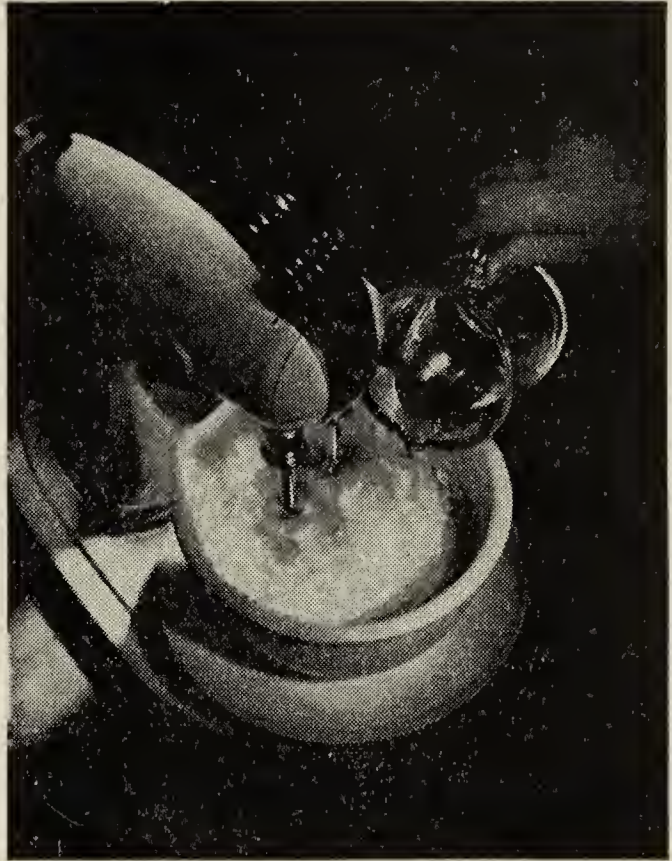


3. Add about $\frac{1}{4}$ c. of oil in small quantities at a time (about $\frac{1}{2}$ t.), beating all the time.

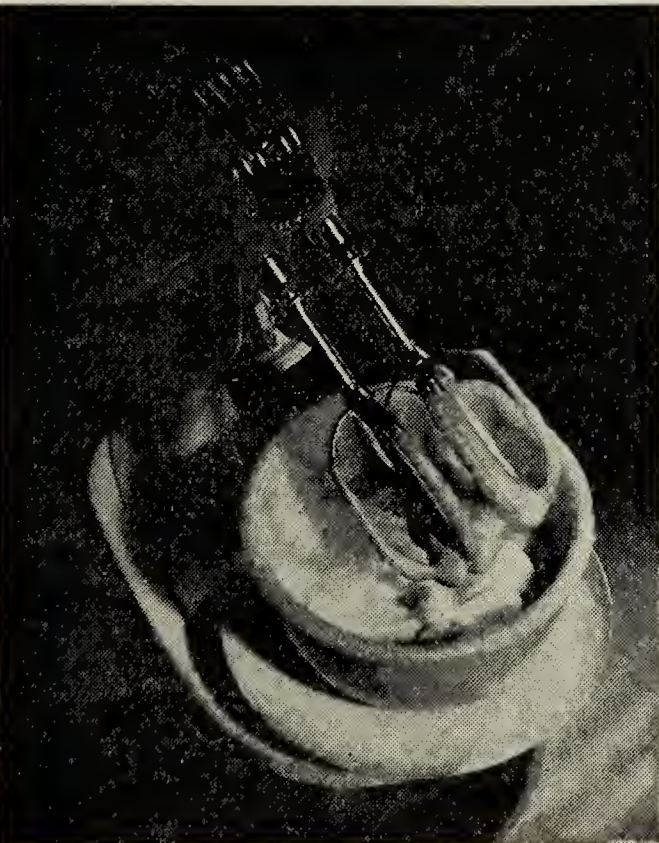
MAYONNAISE



4. Add 1 T. of vinegar slowly, beating all the time.



5. Add remaining oil, thinning, as mixture thickens, with remaining vinegar, until all of each is used. Beat continuously.



Photos from H. J. Heinz Company

6. Beat until the dressing is thick and smooth, a perfect emulsion.

Variations of Mayonnaise

Add fruit juices or whipped cream for fruit dressing.

Add pickles and onion juice for tartare sauce.

Add catsup for Russian dressing.

Add horseradish for tangy dressing.

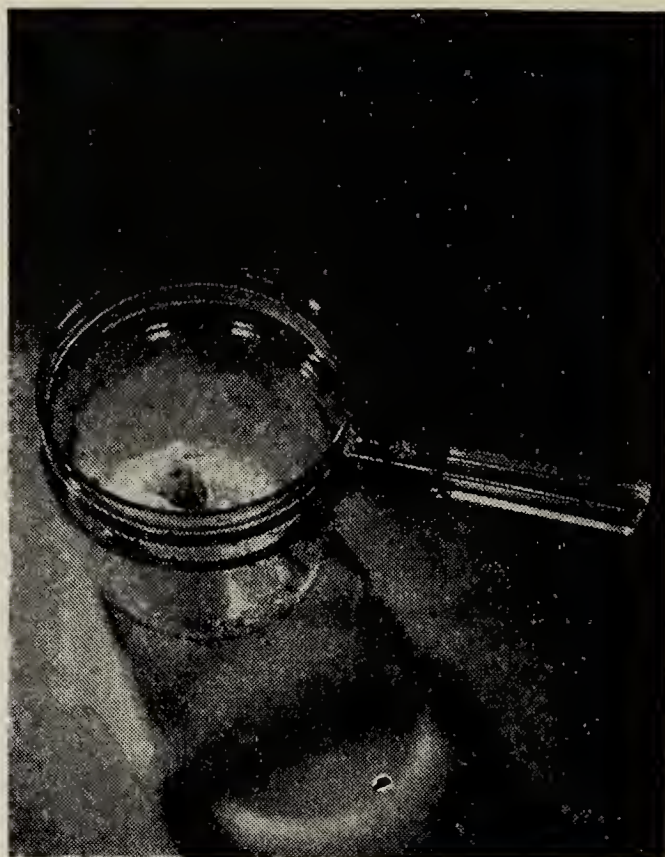
Add chopped sweet pickles, olives, pimientos, and chili sauce for Thousand Island dressing.

Note: If mayonnaise curdles, place the yolk of an egg in a clean bowl and beat well; then gradually add the curdled mixture to the egg, beating constantly.

HOW TO MAKE

Ingredients

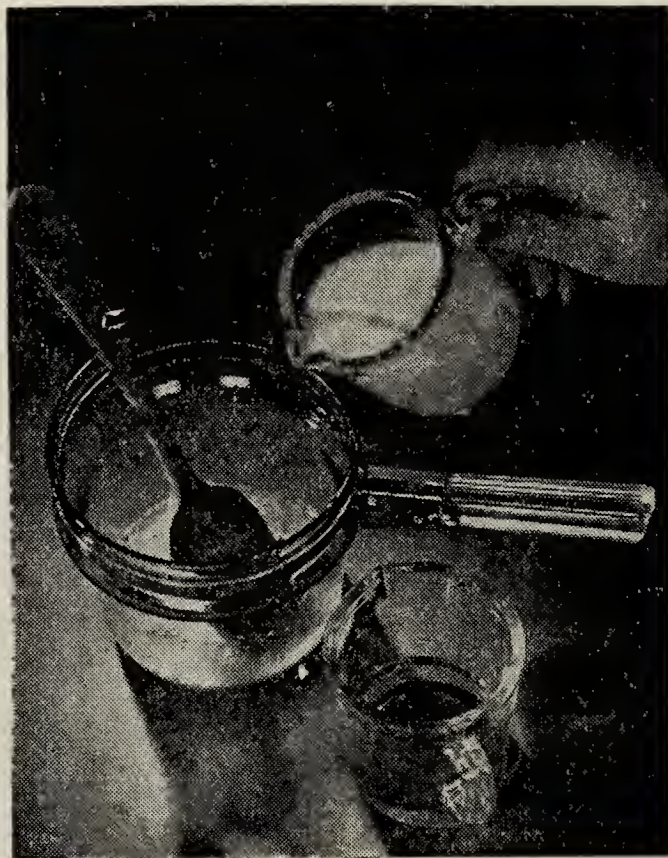
- 3 T. sugar
- 1 t. salt
- 1 t. prepared brown or yellow
mustard
- 1½ T. flour
- 1 egg or 2 egg yolks
- ¾ c. milk
- 4 T. vinegar
- 1 T. butter or margarine



1. Blend sugar, salt, mustard, and flour.

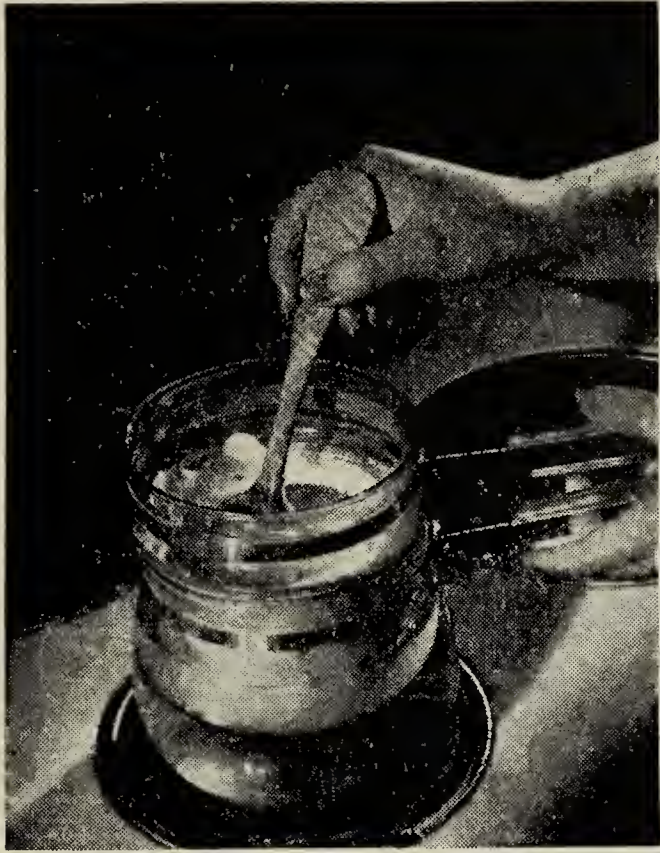


2. Add egg; then beat until smooth.



3. Add milk, mixing well; then add vinegar slowly, stirring continuously.

COOKED SALAD DRESSING



4. Cook over boiling water, stirring constantly, until thick.



5. Remove from fire; then add butter.



Photos from H. J. Heinz Company

6. Pour into glass container. Cover, cool, and store in refrigerator.

Variations of Cooked Salad Dressing

Add plain cream, whipped cream, or fruit juice for fruit dressing.

Add catsup, pickle relish, and sugar for head lettuce salad.

Add peanut butter for fruit and vegetable salad.

Add lemon juice and sugar for cole slaw dressing.

the table and allow each person to use it on the salad as he wishes. When practical, allow a choice of dressings for each person.

6. Salads should be arranged simply and naturally on the plate. Avoid arrangements which are intended to represent poinsettias, stars, or other objects. Salads are not meant to be picture books, but your salad can be as pretty as a picture if you arrange the food simply and attractively. Choose foods which will have a pleasing effect. The time spent and the extra handling required in preparing fancy salad arrangements is likely to result in a loss of freshness and flavor. Salads should not be so large or plates so small that the lettuce leaves hang over the edge. A salad which is too large for the plate is not easy to eat because it tends to scoot off the plate.

A salad accompaniment. Crisp, salty crackers are good with stuffed tomato salads, and thin bread-and-butter or cream cheese sandwiches are good with the lighter salads. Melba toast (a very thin, dry, well-browned toast) is also a good salad accompaniment. In choosing a salad accompaniment, plan for flavors which combine well.

Laying a cover for a salad and beverage. The diagrams on page 391 will show you how to place the salad plate, fork, glass, and other equipment. Notice that the bread-and-butter plate is at the end of the fork. Of course, a bread-and-butter plate is not always needed, depending upon how much room is left on the salad plate and the size of the accompaniment. Since no knife or spoon is needed for salad, the fork is placed at the right. Notice how the napkin is folded and placed at the left of the plate.

Standards for judging a salad. The following questions point out the desirable characteristics in a good salad. Keep these standards in mind as you prepare a salad.

1. Is the salad crisp and cold?
2. Is the combination of flavors good?
3. Is the salad of good consistency? Watery or "runny" salads are not appetizing.
4. Is the salad easy to eat? It should be prepared in bite-size pieces or be easy to cut.
5. Is the dressing suitable for the type of salad?
6. Is the dressing arranged nicely? It should not be smeared or messy in appearance.
7. Is the salad well chosen for its purpose: main dish, dinner salad, dessert?
8. Is the general appearance of the salad attractive?

Recipes for vitamin C salads

STUFFED TOMATO SALAD

SERVES 4

4 medium-sized tomatoes, chilled $\frac{1}{4}$ t. salt
 $1\frac{1}{3}$ c. filling, such as cottage cheese, salad greens, such as lettuce, endive,
cole slaw, meat, fish, vegetables water cress, that are washed, dry,
cold and crisp, for the base.

SKIN 4 medium-sized tomatoes.
CUT a well in the center of each tomato for the filling, or slightly cut
across in two directions to make four sections.
SPRINKLE lightly with salt and turn upside down, and return to the refrig-
erator until ready to complete the salad.
ARRANGE the lettuce or other salad greens, that have been prepared in ad-
vance, on salad plates.
FILL the tomatoes with cottage cheese, cole slaw, chicken, tuna, or sal-
mon filling (see below), and place on salad greens.

COTTAGE CHEESE FILLING

$1\frac{1}{3}$ c. cottage cheese F. G. salt
2 T. cream F. G. pepper
 $\frac{1}{4}$ t. chopped onion F. G. cayenne

MIX gently $1\frac{1}{3}$ c. cottage cheese, 2 T. cream, $\frac{1}{4}$ t. chopped onion, F. G.
salt, pepper, and cayenne.
ARRANGE the salad greens on salad plates.
PILE the filling lightly in the well of each tomato, and place the stuffed
tomatoes on the salad greens. Serve with French dressing (pages
22 to 23).

COLE SLAW

$1\frac{1}{3}$ c. shredded cabbage 1 recipe cream dressing (page 31)

PREPARE cream dressing and chill.
SHRED $1\frac{1}{3}$ c. cabbage and mix with dressing.
ARRANGE the salad greens on salad plates.
PILE the cabbage in the well of each tomato; place the tomatoes on the
salad greens; and garnish with paprika, parsley, or green pepper.

CHICKEN, TUNA, OR SALMON FILLING

$\frac{3}{4}$ c. flaked fish or cut chicken 2 T. mayonnaise or cooked salad
 $\frac{1}{4}$ c. diced celery dressing
 $\frac{1}{3}$ c. diced cucumber $\frac{1}{8}$ t. salt
F. G. pepper

- FLAKE the fish or cut the chicken in small pieces; add $\frac{1}{4}$ c. diced celery, $\frac{1}{3}$ c. diced cucumber, $\frac{1}{8}$ t. salt, F. G. pepper, and just enough mayonnaise or cooked salad dressing to moisten. Mix lightly, using two forks.
- ARRANGE the salad greens on salad plates.
- PILE the filling into the well of each tomato; place the stuffed tomatoes on the salad greens.
- GARNISH with sliced hard-cooked eggs, additional mayonnaise, or cooked salad dressing and paprika.

SUMMER SALAD PLATTER



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- | | |
|--------------------------------|---------------------------------|
| 2 tomatoes | water cress, washed and chilled |
| 1 medium cucumber | 1 cup mayonnaise |
| 1 head lettuce, leaves chilled | |

- WASH and prepare two tomatoes, 1 medium cucumber, lettuce leaves, and water cress.
- ARRANGE attractively on a deep platter or in a bowl. Pile mayonnaise or salad dressing in the center. Serve at the table.

COMBINATION SALAD

SERVES 4

3 medium-sized tomatoes salad greens, washed and chilled
1 small cucumber ½ small green pepper, if desired

WASH and peel 3 medium-sized tomatoes and slice ⅓ inch thick. Peel or score the cucumber and slice ¼ inch thick.

ARRANGE the greens on the salad plates and place the sliced tomatoes and the cucumbers on the greens. Cut rings of green pepper and place them on the top of each salad.

SERVE with the type of dressing preferred. The dressing may be served from a bowl. This permits each person to use the dressing on his salad as he wishes.

Salad dressings and accompaniments

CREAM DRESSING

¼ c. cream 1½ T. vinegar
3 t. sugar ⅛ t. salt
F. G. pepper

MEASURE 3 t. sugar, ⅛ t. salt, and F. G. pepper into a small bowl or cup. Add 1½ T. vinegar and stir.

ADD ¼ c. cream to the mixture and chill.

FRUIT SALAD DRESSING

2 eggs ¼ c. pineapple juice
2 T. lemon juice ¼ t. salt
½ c. whipped cream

BEAT 2 eggs and ¼ t. salt in the top of a double boiler.

ADD 2 T. lemon juice and ¼ c. pineapple juice to the eggs and cook over hot water until thick, stirring constantly. Cool.

BEAT ½ c. heavy cream until stiff, and fold into the fruit mixture. Serve with the fruit salad.

BREAD-AND-BUTTER SANDWICHES

NOTE: Day-old bread is best for sandwiches.

CUT the bread in ¼ inch slices.

KEEP each two slices together as pairs and open, placing one slice to the left and the other to the right.

SPREAD each slice with soft butter, place the buttered sides of bread together, and cut in two or four pieces. Usually, two slices of bread are used for each sandwich of luncheon size.

Recipes for cooked tomatoes

BAKED STUFFED TOMATOES

SERVES 6

6 firm medium tomatoes	2 t. sugar
1 c. soft bread crumbs	1 T. minced onion
$\frac{1}{2}$ c. cooked corn	2 T. minced parsley
2 T. butter or fortified margarine	2 T. minced celery leaves
	1 t. salt

TURN the oven to 350° F.

WASH 6 firm medium-sized tomatoes; remove the stems and carefully scoop out the centers with a paring knife or spoon; and place the pulp in a bowl. Turn the whole tomatoes upside down.

ADD 1 c. soft bread crumbs, $\frac{1}{2}$ c. cooked corn, 1 T. minced onion, 2 T. parsley, 2 T. minced celery leaves, and 1 t. salt to the tomato pulp in the bowl and mix.

FILL the cavity of each tomato with the mixture; dot with 2 T. butter or fortified margarine. Place the stuffed tomatoes in a shallow pan, and bake in a moderate oven (350° F.) for 25 minutes.

NOTE: Such vegetables as green beans, lima beans, or peas may be used instead of corn. Leftover meat, chicken, or salmon makes a delicious filling, and tomatoes stuffed with one of these fillings are then used as the main dish.

BAKED TOMATO HALVES

SERVES 4

2 large tomatoes	1 T. chopped celery leaves
$\frac{1}{4}$ t. salt	$\frac{1}{2}$ T. chopped onion
$\frac{1}{2}$ t. prepared mustard	$\frac{1}{2}$ T. butter or fortified margarine
1 T. chopped parsley	

TURN the oven to 350° F.

WASH 2 large tomatoes, remove the stem ends, and cut crosswise in half.

SPRINKLE the tomatoes with $\frac{1}{4}$ t. salt, and spread with $\frac{1}{2}$ t. prepared mustard.

CHOP $\frac{1}{2}$ T. onion, 1 T. parsley, and 1 T. celery leaves and place over the mustard.

DOT the tomatoes with $\frac{1}{2}$ T. butter or fortified margarine and bake them in a moderate oven (350° F.) for 30 minutes.

SCALLOPED TOMATOES

SERVES 4-6

1 No. 2 can (or 2½ c.) cooked to- matoes	2 T. butter or fortified margarine
1 c. soft bread crumbs	1¼ t. salt
2 T. chopped onion	2 T. sugar
	⅛ t. pepper

GREASE a baking dish. Turn the oven to 400° F.

COMBINE 2½ c. tomatoes, 2 T. onion, 1¼ t. salt, ⅛ t. pepper, 2 T. sugar, and pour into the baking dish. Top with 1 c. of bread crumbs, dot with 2 T. butter or margarine, and bake in a hot oven (400° F.) for 25 minutes or until brown.

CLASS ACTIVITIES

1. Make other types of tomato salads which were not attempted in your first project.
2. Discuss bowl salads which are served at the table by the hostess. On what occasions are these salads especially well chosen?
3. Plan a luncheon for hot weather with salad as the main dish; for cold weather with salad as the main dish.
4. Collect pictures of attractive salads and table settings with salads as a feature.
5. Use your ingenuity to "invent" a new kind of tomato salad.
6. Get acquainted with different kinds of vinegar used for salad dressing: cider, tarragon, distilled white, and malt. How do they differ in flavor? In their making?

FUN WITH FOOD AT HOME

1. Make salads for the family meals, and report on your success.
2. Make a kind of salad dressing which is new to your family, and observe the family reaction to it.
3. Start your own collection of recipes with your favorite kind of tomato salad and dressing. A box which holds 3" x 5" or 5" x 7" cards provides a convenient file for your recipe collection. Classify your recipes under the seven basic food groups. Begin your collection of vitamin C Recipes now.

2. *Conserving vitamin C for winter*

Ripe tomatoes, straight from garden to table, are available in the northern section of the country for only a few weeks during the summer. Shipments from warm-climate sections, California, Florida, Texas,

and Mexico, reach the northern states during the winter months; but these must necessarily be picked green and generally do not ripen with the same firmness and sweet, luscious quality as those from home gardens. Shipping costs add considerably to the price for out-of-season tomatoes.

Canning delicious homegrown tomatoes is an excellent method of providing for winter needs and, incidentally, preserving good food at low cost. Do you wish to have a Christmas party with red tomato juice cocktails? Or a January supper party with tomato soup or scalloped tomatoes? Although canned tomatoes do not duplicate fresh ones in firmness and can not be sliced for salads, there are many other uses for them. Junior homemakers will find that canning tomatoes is an easy process to learn and fun to do. Teen-age canners, as well as their seniors, take great pride in displaying their beautiful jars of red tomatoes.

The boiling-water bath for canning tomatoes. Various methods of canning are used for the preservation of foods, but only two of these methods are approved by canning experts as effective and safe. The boiling-water bath, steam-pressure cooking, open-kettle canning, and oven canning are the four methods which have been used extensively, but only the boiling-water bath and the steam-pressure canning are recommended for effective food preservation and for personal safety. Objections to the open-kettle method and to oven canning are quoted from a government publication in the following paragraphs.¹

A word of warning on other canning methods. Oven canning is dangerous in more ways than one. Even though the oven goes to 250° F. or higher, food in the jars stays at about boiling point (212°). For vegetables, that's not hot enough to make bacteria harmless.

Also, oven canning has caused serious accidents to persons and property. When jars seal during processing, steam builds up inside the jars and they may explode. The oven door may fly off; glass may fly out; you may be hit and seriously hurt by the flying pieces, and your kitchen wrecked.

Open-kettle canning is wasteful for fruits and tomatoes. When canned this way, food is cooked in an ordinary kettle, then packed into hot jars and sealed. Bacteria can get into jars when food is transferred from kettle to jar and cause the food to spoil.

For vegetables open-kettle canning is dangerous. They never become hot enough to destroy the bacteria.

¹ *Home Canning of Fruits and Vegetables*. AWI-93. Prepared by Bureau of Human Nutrition and Home Economics, Agricultural Research Administration, U. S. Department of Agriculture. May, 1944.

Use this method only for preserves, pickles, and other foods with enough sugar or vinegar to help keep them from spoiling.

The boiling-water bath is considered the best canning process for fruits and tomatoes because of their acid content. The acid acts as a preservative and helps to prevent spoilage. Nonacid vegetables such as corn, beans, or peas can be canned safely only by the pressure-cooker method. Since we are concerned with canning tomatoes at this point in our study, we will learn how to use the boiling-water method of food preservation.

A SAFETY REMINDER: Remember to have a lifter for putting the jars into the boiling bath and for removing them.

Jars and lids for canning. There are several types of jars and lids which are satisfactory for canning foods. Naturally, you will use the type which you have on hand either in your home kitchen or your school kitchen. However, it is wise to become acquainted with the various kinds so that when you purchase new ones you will know which kind you prefer.

Jars come in quart and pint sizes, and it is advisable to use the size which is best adapted to the size of the family. When there are only two or three people in the family, it is desirable to use the pint size for some foods.

Jars vary in shape, some being round and some square. The latter is preferred by many people because they believe that square jars take less space on the storage shelves and in the refrigerator.

The necks and mouths of the jars vary in size. The old-fashioned or traditional type of jar has a neck which is smaller than the body of the jar. Many people prefer wide-mouthed jars because of the greater ease in putting fruit or vegetables into the jar. Large peach halves or tomatoes are not pushed out of shape as they would be by being crowded through a narrow-neck opening.

The four main types of seals, with directions for using each kind, are shown in the illustrations on page 37. The flat metal lid shown in the third diagram is sometimes called vacuum seal or self-sealing. This type can be procured in a size which fits the tops of glass coffee jars, peanut butter jars, and other jars used for commercial products. In this

case, the original screw-top lids which came with the jars are used to hold the metal lid in place.

Equipment for boiling-water bath. Necessary equipment for processing foods in the boiling-water bath is simple and need not be expensive. The canner may be a kettle, lard can, or wash boiler, which is large enough to hold several jars and deep enough to allow the water to stand one to two inches above the tops of the jars, or a kettle which is bought especially for the purpose. The canner should be fitted with a tight cover and a wire or wooden rack which will keep the jars about one half inch above the bottom of the vessel. Some hot-water canners are fitted with wire racks having separated spaces for the jars so that the jars cannot touch each other or fall against the side of the canner as the water boils. Some of these racks also have wire handles which extend above the water line, making it easy to lift all the jars out of the hot water at the same time. If your canner does not have such a rack, you should have a lifter with which to take each jar out of the water, although it can be done with a long-handled spoon and a thick towel which protects the hand which lifts the jar from the hot water.

Other necessary equipment for processing tomatoes in the boiling-water bath includes a pan for boiling water, a wire basket or thin cloth for use when dipping the tomatoes in hot water to loosen their skins, a paring knife, another kettle for heating the tomatoes, a jar funnel, teaspoon, large spoon, long-bladed knife such as a table knife, and hot-dish holders.

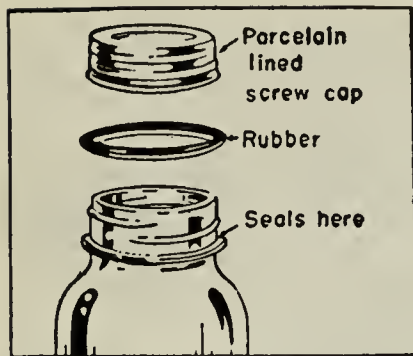
Canning tomato juice. The general process in canning tomato juice is very similar to that for canning whole tomatoes. It is not necessary to peel them, so steps 3 and 4 in the pictured directions given on page 38 can be omitted. Another step must be added, however, before the

A SAFETY REMINDER: When you eat canned foods, guard against canned food which has spoiled; beware of the contents of jars with bulging lids or rubbers, spurting liquid, gas bubbles, and "off" odor or color, or mold; never try to recook spoiled food. *Destroy it.*

juice is ready to pour into the jars. After the tomatoes have simmered 10 minutes, run the juice and pulp through a food press or fine sieve; return them to the kettle; and reheat to boiling. The following steps are the same as for canning whole tomatoes, except that it is not necessary to work out the air bubbles with a knife.

TYPES OF SEALS FOR GLASS JARS USED IN HOME CANNING

U. S. Bureau of Human Nutrition and Home Economics



A

Zinc porcelain-lined cap with a shoulder rubber ring, to fit a standard Mason jar.

When canning. Fit wet ring down on jar shoulder, but don't stretch more than needed. Fill jar. Then screw cap down firmly and turn it back $\frac{1}{4}$ inch.

After canning. As soon as you take jar from canner, quickly screw cap down tight to complete seal.



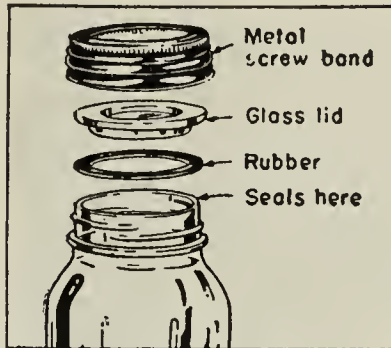
B

Flat metal lid edged with sealing compound, held in place by a metal screw band, to fit a standard Mason jar.

When canning. Fill jar; put lid on so that the sealing compound is next to glass. Screw metal band on firmly, but not so hard that you cut through the compound. When screwed down firmly, this lid has enough "give" to let air escape during canning.

After canning. This is a self-sealer. Leave "as is" when you take from canner. Don't tighten further; you may break the seal.

Next day. When the jar has cooled, take off screw bands if you can without forcing. If band sticks, cover for a minute or two with a hot, damp cloth to loosen it.



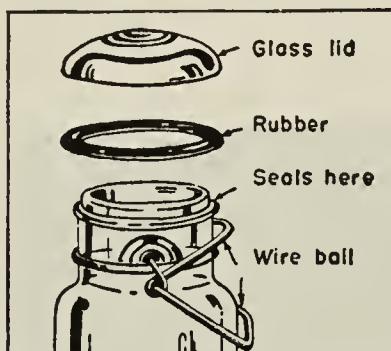
C

Glass lid and top-seal rubber ring, held in place by a metal screw band, to fit a standard Mason jar.

When canning. Fill jar, fit rubber ring on glass lid. Put lid on jar with rubber side down. Screw metal band on tight; then, using your thumb as a guide, turn back almost a quarter turn, or so that band and jar just mesh together. Caution: If the band is screwed too tight, the jar may break.

After canning. As soon as you take jar from canner, screw band down tight.

Next day. When jar has cooled, take off screw band if you can without forcing. If the band sticks, cover for a minute or two with a hot, damp cloth to loosen it.



D

Lightning-type jar, sealed with a glass lid and a rubber ring, held in place by a wire bail.

When canning. Fit wet rubber ring on ledge at top of empty jar. Fill jar. Put on glass lid. Push long wire over top of lid, so that it fits into groove. Leave short wire up.

After canning. As soon as you take jar from canner, quickly push short wire down to complete seal.

HOW TO CAN TOMATOES

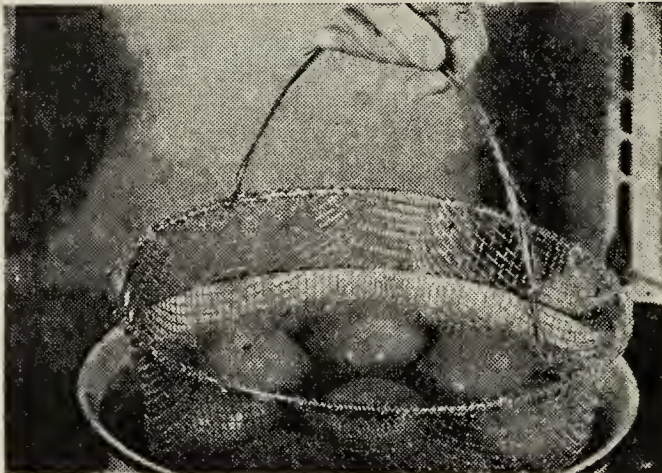
U. S. Bureau of Human Nutrition and Home Economics



1. Look over every tomato. Use only the ripe, firm, and perfect. Even if you cut out a bad spot, bacteria may be left and ruin the whole batch.



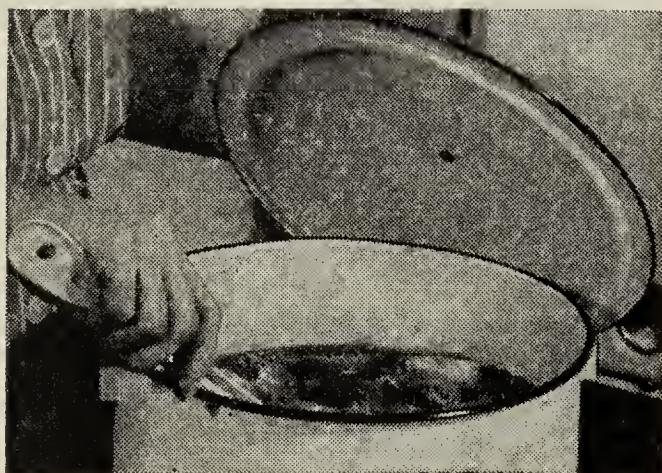
2. Wash tomatoes clean in several waters. Don't bruise. Prepare only enough for one canner load at a time.



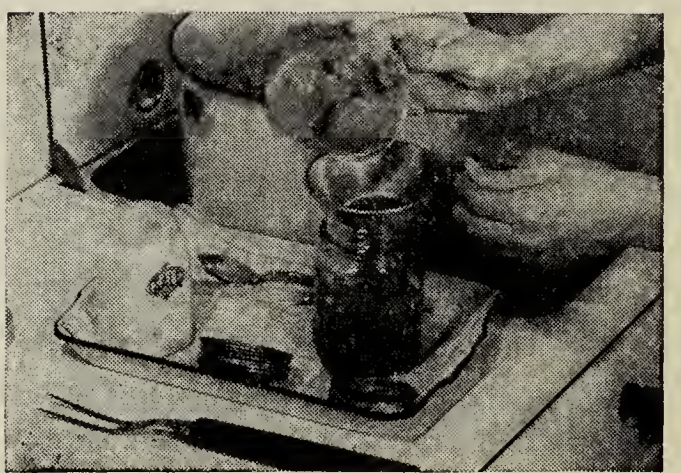
3. Put tomatoes in a wire basket or thin cloth. Dip into boiling water about a minute, then quickly into cold, for easy peeling.



4. Cut out stem ends and peel. Quarter the tomatoes so they will heat through quickly.



5. Heat tomatoes in their own juice. Stir while they heat, and let them come to a rolling boil. Meantime, heat clean jars and lids.



6. When ready to pack, take one jar at a time from hot water. Fill with hot tomatoes. A funnel is handy. Cover with hot juice to within $\frac{1}{2}$ inch of top.

CLASS PROJECT: CANNING TOMATOES, TOMATO JUICE, OR FRUIT JUICE.

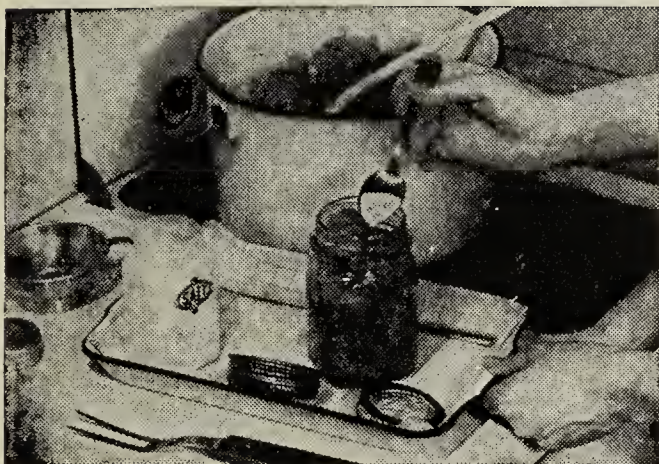
1. Decide what product you will can. This will depend upon available food supplies and upon needs for canned foods during the winter months. For example, you may wish to can tomatoes for a spaghetti party in January, tomato juice for Valentine party cocktails, or grape juice for making jelly later in the season.

2. Watch a demonstration by your teacher of canning by the boiling-water process. One group should be selected to assist in the demonstration. Follow the steps shown in the pictures on these pages.

3. On the next day, each group should can one jar of tomatoes or juice, using the boiling-water process. A different job will be assigned to each member of each group. Know your job and do it efficiently.

4. On the third day, check your jars for leakage, label them, and store them for future use.

5. Take time to judge the appearance of your products.



7. Add salt, a teaspoon to each quart. Work fast, so tomatoes won't cool.

8. Work out air bubbles with a knife blade. Add more juice, if needed.



9. Wipe jar rim with a clean damp cloth. A speck of food on the rim may prevent an airtight seal and cause the tomatoes to spoil.

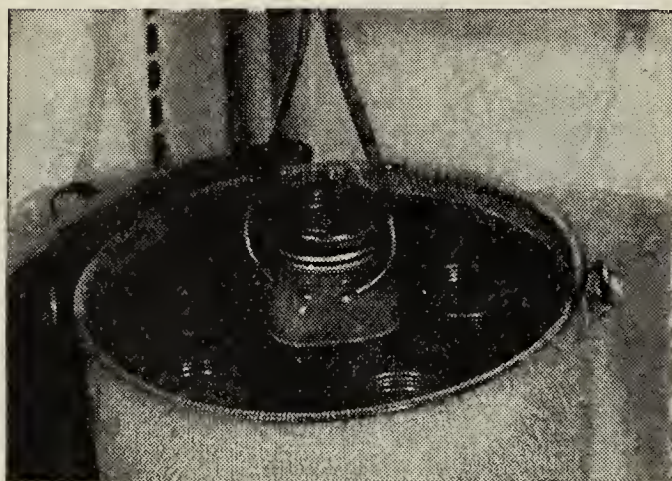
10. Fit hot wet rubber ring on glass lid. There is a ledge on the underside where the ring fits like a collar.



11. Set the glass lid rubber side down on the jar, so that rubber ring and jar rim are in contact.



12. Screw metal band on tight. Then, using your thumb as a guide, turn back almost a quarter turn, or so that band and jar just mesh together. Put jars in canner as soon as filled.



13. Have water 1 or 2 inches over tops. Put on canner lid. When water boils hard, count time, and process 10 minutes at sea level (longer at higher altitudes).



14. When the time is up, take out one jar at a time and quickly tighten the screw band. Keep jars top side up, and place on thick cloth or paper to cool.



15. While cooling, keep jars well apart and out of drafts. Next day, remove the screw bands if you can without forcing. If they stick, cover for a minute or two with a hot, damp cloth to loosen.

Twenty-four hours later:

1. Look for signs of imperfect sealing. Do not turn jars upside down. This may break the seal. Look for bulging rubbers or caps. Tap metal lids with a silver spoon and listen for a clear, ringing tone.
2. Wipe sticky jars with a damp cloth and then with a dry cloth.
3. Label each jar with the date and any other important data.
4. Store jars in a cool, dark, dry place.

Canning fruit juices. The same general process used for canning tomato juice is also used for canning fruit juices, except that fruit juice is strained through a cloth bag. Juice from grapes, elderberries, wild cherries, plums, cherries, and other fruits is very good in fruit drinks and also makes good jelly. Often, it is advantageous to can the juice and make the jelly at a later time.

The most beautiful jelly is made from juice which has been strained so that it is entirely free from tiny particles of pulp. When held up to the light, it is clear and sparkling. The recipe below separates the clear juice from that containing pulp, making clear jelly and grape jam.

Using grapes for jelly and butter

GRAPE JUICE FOR JELLY

7 lbs. Concord grapes	$\frac{1}{2}$ c. water
2 lemons	$\frac{1}{2}$ c. sugar

WASH	and stem 7 lbs. grapes and place them in a preserving kettle.
ADD	$\frac{1}{2}$ c. water and simmer 15 minutes, stirring occasionally to prevent sticking.
DRAIN	the thin juice which flows easily through the sieve.
DRIP	the same juice through a jelly bag. This juice will make the best-looking jelly.
PROCESS	the juice in a hot-water bath for 10 minutes in jars for future use, or continue to make jelly.
PRESS	the remaining juice and pulp through a fine sieve or jelly bag.
ADD	$\frac{1}{2}$ c. sugar and the rind and juice of 2 lemons to the juice, and cook for 15 minutes.
POUR	into sterilized jars and seal.
LABEL	the jars and store in a cool, dark place.

GRAPE JELLY

1 c. grape juice to $\frac{3}{4}$ c. sugar (If the grapes are not very ripe, use 1 c. sugar.)

STERILIZE	the jelly glasses.
BRING	the juice to boiling, add sugar, and stir until dissolved. Boil until two drops drop at once from a metal spoon, or "sheet" from spoon.
POUR	into sterilized glasses and top with melted paraffin; cool; slightly wipe off the glasses; label and date.
COVER	with tops, cellophane, or paper; and store in a cool, dark cupboard.

CANNING TIMETABLE FOR FRUITS, TOMATOES, AND PICKLED VEGETABLES

Bureau of Human Nutrition and Home Economics

KIND OF FOOD	HOW TO PREPARE	TIME TO PROCESS IN BOILING- WATER BATH AT 212° F.	
		PINTS	QUARTS
		<i>minutes</i>	<i>minutes</i>
Apples	Pare, core, cut in pieces. To keep from darkening, dip in a gallon of water containing 2 tablespoons of salt and 2 of vinegar. Steam or boil in thin sirup or water 5 minutes. Pack hot; cover with hot liquid. Adjust lids. Process for.....	15	15
	Or make applesauce , sweetened or unsweetened. Pack hot. Adjust lids. Process for.....	10	10
Apricots	Same as peaches.		
Beets, pickled	Cook beets until tender in water to cover. Remove skins; slice. Pack hot. Cover with boiling liquid (2 cups vinegar to 1 cup sugar). Add 1 teaspoon salt to each quart jar. Adjust lids. Process for.....	30	30
Berries (except straw- berries)	Drain well after washing. For firm berries, add $\frac{1}{2}$ cup sugar to each quart fruit, cover pan, bring to boil, and shake pan to keep them from sticking. Pack hot; cover with hot liquid. Adjust lids. Process for.....	15	15
	For red raspberries and other soft berries, fill jars with raw fruit and shake down for a full pack. Cover with boiling sirup made with juice. Adjust lids. Process for.....	20	20
Cherries	For pitted cherries, follow directions for firm berries. For cherries with pits, follow directions for firm berries but add a little water to prevent sticking. Adjust lids. Process for.....	15	15
Peaches	For easy peeling, put peaches in wire basket or cheesecloth and dip for a minute or two in boiling water, then quickly into cold. Slip off skins; take out pits. Slice or cut in halves. To keep from darkening, dip in a gallon of water containing 2 tablespoons of salt and 2 of vinegar; drain. If fruit is juicy, add $\frac{1}{2}$ cup sugar to each quart of raw fruit. Heat to boiling. For less juicy fruit, drop into thin to medium sirup, boiling hot, and just heat through. Pack hot; cover with boiling liquid. Adjust lids. Process for.....	20	20
Pears	Peel, cut in halves, core. Same as less juicy peaches.		

KIND OF FOOD	HOW TO PREPARE	TIME TO PROCESS IN BOILING- WATER BATH AT 212° F.	
		PINTS	QUARTS
		<i>minutes</i>	<i>minutes</i>
Pimientos, ripe	Place in hot oven for 6 to 8 minutes. Dip into cold water. Remove skins, stems, and seed cores. Pack and add $\frac{1}{2}$ teaspoon of salt to each pint. Do not add liquid. Adjust lids. Process for	40	..
Plums, prunes	To can whole, prick skin. Or cut in half. Heat to boiling in juice, or in thin to medium sirup. Pack hot; cover with boiling liquid. Adjust lids. Process for	15	15
Rhubarb	Cut into $\frac{1}{2}$ inch lengths. Add $\frac{1}{2}$ cup sugar to each quart rhubarb and let stand to draw out juice. Bring to boil. Pack hot; cover with hot juice. Adjust lids. Process for	10	10
Sauer- kraut	Heat well fermented sauerkraut to simmering—do not boil. Pack into jars; cover with hot juice. Adjust lids. Process for	25	30
Straw- berries	Stem berries and add $\frac{1}{2}$ cup sugar to each quart of fruit. Bring slowly to boil. Remove from stove. Let stand overnight. Bring quickly to boil. Pack hot; cover with hot juice. Adjust lids. Process for	15	15
Tomatoes	Use only perfect, ripe tomatoes. Scald, remove stem ends, peel, and quarter. Bring to rolling boil; stir as tomatoes heat. Pack hot; add 1 teaspoon salt to each quart. Adjust lids. Process for	10	10
Tomato juice	Use soft but perfect tomatoes. Remove stem ends, cut into pieces. Simmer until softened. Put through a fine sieve. Add 1 teaspoon salt to each quart. Reheat at once just to boiling. Fill into hot jars or bottles at once. Leave $\frac{1}{4}$ inch head space in jars, $\frac{1}{2}$ inch in bottles. Adjust lids. Process for	15	15
Fruit juices	Berries, red cherries, plums, or blends of these—remove pits; crush the fruit. Heat to simmering. Strain through a cloth bag. Add sugar if desired—about $\frac{1}{2}$ to 1 cup sugar to 1 gallon of juice. Heat again to simmering. Fill into hot jars or bottles. Leave $\frac{1}{4}$ inch head space in jars, $\frac{1}{2}$ inch in bottles. Adjust lids. Process for	5	5
Fruit purees	Use soft, but sound fruit. Put cooked fruit through a fine sieve. Proceed as for fruit juices. Adjust lids. Process for	20	20

GRAPE BUTTER

4 c. fruit pulp
3 c. sugar

2 T. lemon juice

STERILIZE glasses or jars.

PRESS 4 c. fruit pulp through a coarse sieve after the juice has been extracted. Place in a kettle with 3 c. sugar and 2 T. lemon juice; boil rapidly for 20 minutes, stirring constantly.

POUR into sterilized glasses or jars and seal with melted paraffin. Cool. Slightly wipe off the jars; label and date; and store in a cool, dark cupboard.

CLASS ACTIVITIES

1. Use what you have learned in canning tomatoes, and can peaches or pears by the boiling-water bath process. See the tables on canning fruits on pages 42 and 43.

2. Hold a class canning contest. Enter your jars of tomatoes or other products, and vote for the jar which is most attractive in appearance. Make a list of the points which you think help the good appearance of a jar of tomatoes.

3. Hold a school or community canning contest, and invite people from the community to exhibit their best jars of canned foods. Arrange for judges, and have them award ribbons for prizes.

4. Compare the cost of a jar of home-canned tomatoes with the cost of a can of commercially-canned tomatoes.

5. Look up the history of the tomato, and learn how it was once regarded as a poisonous food and is now considered a very nutritious one.

FUN WITH FOOD AT HOME

1. Can four quarts or more of tomatoes. Report on your project and evaluate your success. Criticize your method of working. Did you plan your work effectively? How much time did you spend on the project? How did you waste time? How much money did you save according to current prices for canned tomatoes?

2. Can some tomato purée for soups; make catsup or tomato preserves. Report on your success.

3. *Citrus fruits for breakfast, lunch, and dinner*

The citrus fruits are important members of the vitamin C family and are used to provide excellent eating at any meal. Oranges, grapefruit, lemons, limes, tangerines, and kumquats are the principal varieties of

citrus fruit which find their way to our tables. Delicious salads, fruit cups, and juices to drink help to give our meals taste appeal and, at the same time, provide us with a rich store of vitamin C.

Citrus fruits for breakfast. Oranges or grapefruit have become an essential food with many families, especially during the winter months when other fresh fruits are not plentiful. The development of transportation facilities has made it possible to ship citrus fruits from California, Florida, Texas, and other southern states to the northern part of the country so that anyone can have them on the breakfast table. Since people have learned the importance of citrus fruits in the diet and because they are so delicious, many families have citrus fruit every morning in the year.

A citrus fruit every morning need not mean always the same thing for breakfast. Oranges may be served sliced in sections, in halves, or in juice. Grapefruit may be served in halves, in sections, or as juice. Tangerines served in sections or kumquats served whole can be used to vary the menu. None of these ways of serving a citrus fruit is difficult, but you should learn how to do each one quickly and nicely. You should also learn how to select good-quality citrus fruit when you go to the store or buy from the huckster.

The selection of good citrus fruit. Serving good oranges or grapefruit on your breakfast table begins with their selection in the market. Here are some general points to remember when you buy citrus fruit.

1. Citrus fruits should be heavy for their size, moderately firm, and fine-textured. These qualities indicate juiciness. When a fruit is lightweight, too hard or too soft, with thick, coarse-textured skin, it is sure to contain little juice. Plenty of juice is essential to ripe, good-tasting citrus fruit.

Of course, tangerines, Satsuma oranges, and Temple oranges cannot be judged in exactly the same way as other citrus fruits because the skin is loose and easily peeled off, but a good tangerine, although it does not feel firm in the same way as a good orange, is heavy for its size and is thin-skinned.

2. Color should not be considered an absolute guide to the juiciness and flavor of a citrus fruit. Bright orange color is not always an indication of ripe and juicy oranges. Some oranges, the Valencias, are greenish in color when they are fully mature. Some of these greenish Valencias reach the retail market with their greenish color, but many shipments are treated with a gas which turns the fruit an orange color. It is because consumers do not understand that Valencia oranges can be fully ripe

and remain greenish in color, that the producers color the orange skins artificially. The gassing does not affect the juiciness, flavor, or vitamin content of the orange, but it is a needless expense which is added to the price which the consumer pays for his oranges. A federal law regulates the coloring of oranges so that it is illegal to color unripe oranges which do not contain the stipulated amount of fruit sugar.

3. The skin of good grapefruit varies from pale yellow to russet or brownish color. Many people prefer the yellow grapefruit, but the russet fruit may be more juicy and finer in flavor. Color is very little help in the selection of a good grapefruit, except that an obviously greenish hue indicates unripe fruit.

“Pink-meat” grapefruit is popular, not only because of its color, but because it is generally sweeter and juicier than other varieties.

Ripe lemons are yellow with the characteristic shade which is known as lemon-yellow. Limes should be green rather than yellow because the greenish fruit is more acid in flavor. Lime-green is a popular color name which was taken from the color of the fruit as it looks when ready for use.

4. Select the kind of fruit which suits your purpose. If you want oranges for juice, buy “juice oranges.” The best oranges for juice contain seeds, are difficult to skin and to separate into segments. Since they yield more juice than the seedless variety, they constitute the best buy when one wants oranges for juice. The Valencias are good “juice oranges” and are sometimes referred to as Florida oranges, although they are grown in Texas and California as well as in Florida.

The seedless or navel oranges, sometimes called California oranges, are easily skinned and separated into segments. They are not as juicy as good Valencia oranges, yet they contain plenty of juice for good eating. Naturally, you will choose the navel oranges for salads, fruit cups, and slicing.

5. Will you buy by the dozen or by the pound? Grapefruit is generally sold separately and other citrus fruits by the dozen. However, oranges are sold by the pound in some localities. This is a distinct advantage to the consumer because one has a better chance of obtaining juicy oranges. Oranges from two different lots may cost the same per dozen, but one lot of oranges may be much juicier than the other. When oranges are sold by the pound, the consumer is more likely to get his money’s worth because weight is an indication of juiciness.

6. Select small oranges rather than large ones for the best yield of juice. Investigation has shown that the smaller sizes give more juice per

CLASS PROJECT: A LIGHT BREAKFAST WITH A CITRUS FRUIT.

Plan, prepare, and serve a light breakfast including a citrus fruit, buttered toast, and cocoa.

1. Watch a demonstration by your teacher of preparing citrus fruits in various ways; of preparing buttered toast (see the directions on page 56); of making cocoa (see the recipe on page 57).

2. Observe the correct way to lay a cover for a breakfast with a fruit juice; a breakfast with citrus fruit on a plate. What eating implements are required for a breakfast with sliced oranges? With orange juice? With a half grapefruit?

3. Plan your breakfast. Be sure that each girl in your group knows what she is to do so that everything on the menu will be ready at the same time.

4. Work quickly, but be sure you know what to do. Never fail to ask for instructions if you are uncertain about the procedure.

5. Do the cleanup job as quickly and effectively as the preparation. How much of this can be done as the breakfast is being prepared (instead of saving all the dirty dishes until the last)?

6. Check up on your success. Can you see how you could have worked more quickly? Could the breakfast have been more attractive or better tasting? How?

pound than the larger sizes. The size of oranges is indicated by the number which can be packed into a standard crate or box, which varies from 80 to 344. Therefore, the 80 size is a very large orange and the 344 size a very small one.

7. Oranges are found in the markets every month in the year. Navels are most plentiful during the autumn and winter months, and the Valencias during the spring and summer months.

Preparing and serving a citrus fruit for breakfast. Oranges and grapefruit are the most popular citrus fruits for breakfast, although tangerines or kumquats are used occasionally. The preparation of these fruits for the table is simple, yet should be done properly if we are to derive the greatest satisfaction in eating them.

1. Wash the fruit in cool water and store it in the refrigerator as soon as it arrives in the kitchen. Most people like their citrus fruits served cold, but a few prefer them at room temperature because they think that the flavor is better that way. Fruit which is kept any length of time should be kept cold and allowed to warm up to room temperature only when it is to be served warm.

2. Grapefruit is generally served in halves. The sections should be loosened from the white membrane partitions with a sharp knife. A special knife which has a curved blade is useful for this purpose. A half grapefruit in which the sections have not been cut loose is not

CLASS PROJECT: A CITRUS FRUIT SALAD OR FRUIT CUP WITH CINNAMON TOAST.

Plan and prepare a salad or fruit cup in which citrus fruits constitute the chief ingredients. Serve cinnamon toast with the salad.

1. Watch a demonstration of the preparation of a fruit cup, a fruit salad, and toast sticks or toasted rolls.
2. Plan the ingredients for your fruit cup or salad, depending upon the fruits which are available. Try to make the best combination of flavors possible. Some groups in your class may make salads, and others may make fruit cups.
3. Arrange to wash and chill the fruits before class time. Perhaps you can do this on the previous day. If you are planning to have a fruit salad, prepare the dressing at a previous lesson unless the recipe can be made quickly. Work fast and according to plan.
4. Lay the cover for serving your salad or fruit cup and toast correctly. Consult the diagrams on pages 391 and 392.
5. Hold a class inspection of all the covers and service for the salads, fruit cups, and toast. Are the dishes and silverware correctly placed? Is there any unnecessary silver or dishes? Which salad is most attractive? Why? Which fruit cup is most attractive? Which cinnamon toast seems most appetizing?

SAFETY WARNING: Do not hold your knife so that it can slip and cut your hand. Lay the orange on a cutting board for slicing.

pleasant eating because squirting juice too often catches one in the eye.

3. Grapefruit juice is a good citrus fruit for breakfast. The juice is most easily extracted with the type of squeezer which is operated by pressing down with a lever. Cut the grapefruit into pieces small enough to fit into the squeezer.

4. Orange juice is a very popular way of serving a citrus fruit for breakfast. The juice can be extracted by rotating a half orange on the simple little utensil which fits onto the top of a glass, by the lever type of squeezer, or by an electric squeezer. Unless one has several glasses of juice to prepare, the electric squeezer requires too much time and bother to get it ready and to clean it afterward. Of course, you will use Valencias or other "juice oranges" for orange juice.

5. Oranges may be served sliced or in sections. First, the orange is skinned (use navels) and as much of the white membrane as possible is removed. Then the sections may be pulled apart with the fingers or with the aid of a sharp paring knife. In case the orange is to be sliced, cut across the sections.



Sunkist

Sliced oranges on crisp romaine and water cress make an appetite-enticing salad.

6. Tangerines are skinned and served in sections. Membranes should be removed.

7. Kumquats, which are very small, are served whole, and the rind as well as the flesh of the fruit is eaten. Therefore, no preparation is necessary except washing the fruit.

8. Serve the citrus fruit attractively. The glass which contains juice should be clean and shining. Do not allow the juice to spill over the edge of the glass so that it is smeared. Remember that you should never touch the upper part of glass with your fingers when you are preparing and serving a beverage. Take hold of the lower part of the glass. Your fingers might leave fingerprints or even germs on the portion of the glass which is later touched by the lips of the person who drinks from it.

Arrange the slices or sections attractively on the plate. It takes but a few seconds longer to arrange them nicely instead of dumping them on the plate in a careless heap.

Molded salads made with citrus fruits. Gelatin salads and desserts are popular with most people and offer an opportunity for using citrus fruits and juices. Plain gelatin made with lemon juice is generally called lemon jelly and makes a very good wholesome dessert. Gelatin made with orange juice or orange jelly is equally pleasing as a dessert. Most

people like to eat these desserts with cream or soft custard. Sometimes these desserts are garnished with nuts or fruit.

Several variations in gelatin salads and desserts are possible. The gelatin may be molded in square cake tins, then cut in cubes, and mixed with fruit for either a salad or a dessert.

Another variation of a gelatin dessert is obtained by whipping the gelatin with an egg beater until it is full of tiny air bubbles. This whipping must be done when the gelatin is partially set or about the consistency of strained honey or molasses.

A familiar and pleasing treatment of the gelatin salad or dessert is obtained by adding fruit to the gelatin before it is set. Oranges added to orange or lemon gelatin results in a very attractive and delightful salad. When fruits are added to the gelatin, they should be cut in bite-size sections. The gelatin should be partially stiffened before the fruits are added to prevent the fruits from either rising to the top of the mold or sinking to the bottom. The partially stiffened gelatin will hold them in place throughout the mold.

Gelatin desserts and salads may be molded in individual molds, such as custard cups or special gelatin dishes, or in ring molds which are served on a large plate.

Unmolding a gelatin dish, although a simple process, should be done with care. First, loosen the top edge of the gelatin with the sharp tip of a paring knife; next, set the mold in hot water for a few seconds, just long enough to loosen the gelatin from the mold, but not long enough to melt the surface of the gelatin. Third, invert the mold over the dish in which it is to be served, and the gelatin should fall out easily.

Some people use the following short-cut method of unmolding individual gelatin dishes. Invert the mold on a pancake turner, and hold it under the hot-water faucet for a few seconds. When the gelatin has dropped upon the turner, remove the mold, and slip the gelatin gently onto the greens or dish in which it is to be served.

Recipes for citrus fruit dishes

ORANGE AND GRAPEFRUIT SALAD

SERVES 4

1 grapefruit	2 oranges
French or fruit dressing	salad greens, washed and chilled

REMOVE the skin and membrane from 2 oranges and 1 grapefruit down to the meat of the fruit with a sharp paring knife.

CLASS PROJECT: A CITRUS FRUIT AND GELATIN DESSERT OR SALAD.

Make a gelatin salad or dessert, using a citrus fruit juice, citrus fruit sections, or both. Serve with cinnamon toast.

- 1. Study the recipes for gelatin dishes on pages 55 and 56, and decide which one you will make.
- 2. Plan your working schedule carefully. If you plan to whip the gelatin or add fruit to it, remember that it must have time to set. If you have a short class period, you can hurry the stiffening process by setting the dish of gelatin in another dish containing crushed ice.
- 3. Since the time required for the gelatin to stiffen completely is longer than a class period, plan to serve your desserts or salads on the next day.
- 4. Make cinnamon toast as an accompaniment to your gelatin salad or dessert. See the recipe on pages 56 and 57.
- 5. Follow the same plan for serving as in your previous projects. Judge your own product for flavor and attractiveness.

- INSERT the knife along the membrane line going from stem to blossom end, and remove each section.
- CHILL the fruit.
- ARRANGE alternately the grapefruit and orange sections on salad greens, and serve with French or fruit dressing.

FRESH FRUIT PARTY SALAD

SERVES 4

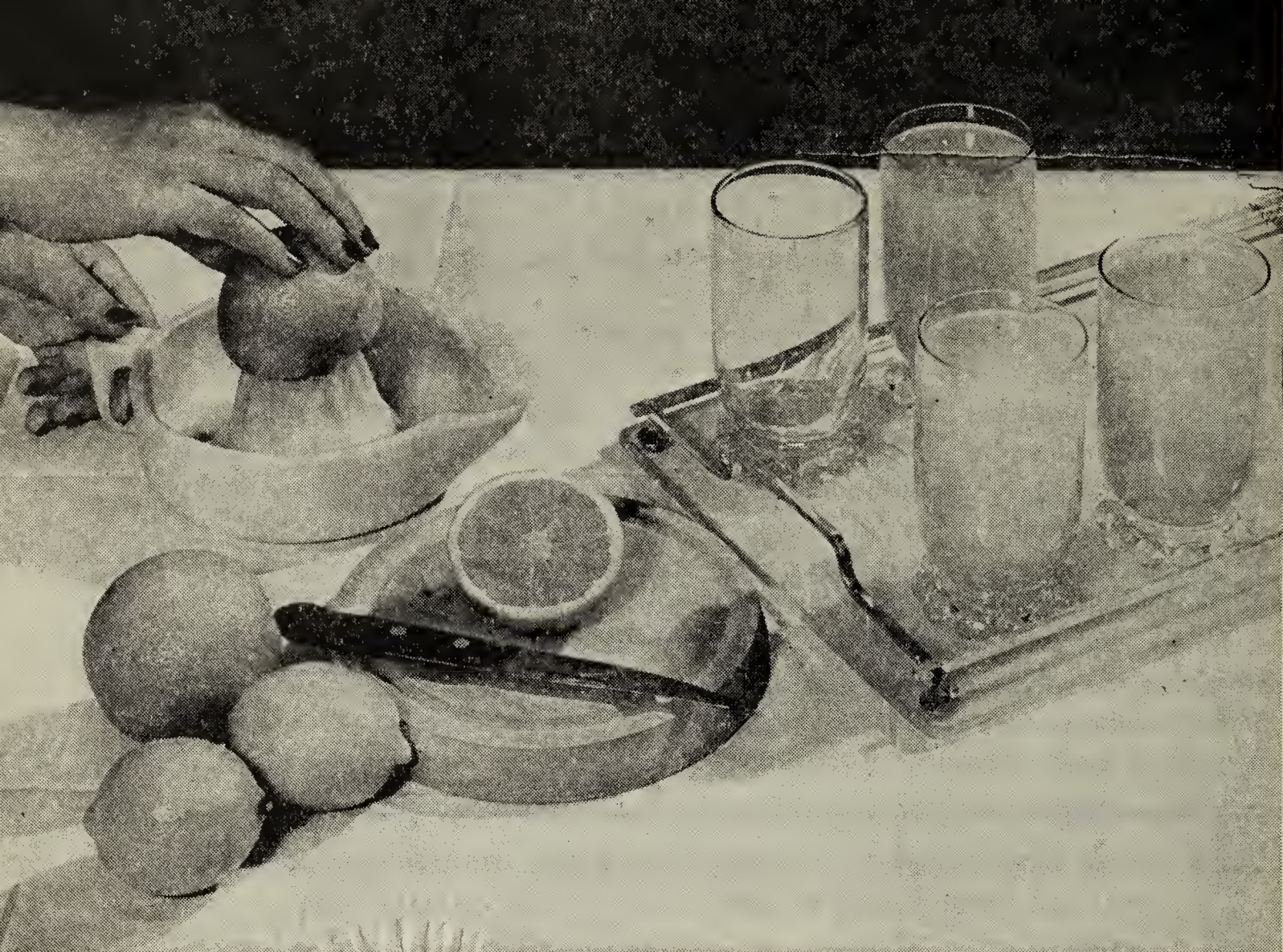
- 1 ripe cantaloupe, chilled
- 1 grapefruit
- endive and lettuce, washed and chilled
- 2 seedless oranges
- 1/2 c. fresh strawberries, blackberries, or sweet cherries

- WASH grapefruit and oranges, section, and chill.
- WASH the cantaloupe, peel, and slice crosswise in half-inch slices.
- ARRANGE the salad greens on salad plates.
- PLACE the cantaloupe rings on the greens, and arrange the other fruit attractively in the center.
- SERVE with French or fruit dressing.

GRAPEFRUIT AND AVOCADO SALAD

SERVES 4

- 2 grapefruit
 - salad greens, washed and chilled
 - 1/2 avocado
- SECTION 2 grapefruit and chill.
- ARRANGE salad greens such as water cress, lettuce, or endive on salad plates.



Sunkist

Preparing orange juice for breakfast.

- PLACE the grapefruit sections on the salad greens.
 REMOVE the skin from half an avocado; slice lengthwise in $\frac{1}{4}$ inch slices; and place alternately with the grapefruit sections.
 SERVE with French dressing.

ORANGE OR GRAPEFRUIT HALVES

SERVES 4

- 4 medium-sized oranges or 2 t. granulated sugar or
 2 grapefruit, chilled 2 t. powdered sugar
- WASH and cut the fruit in half so that the blossom end is in one half and stem end in the other half. Remove the seeds.
- LOOSEN the sections from the membranes and the skin with a sharp paring or fruit knife.
- CUT each membrane at the center so that each section is loose.
- REMOVE the center or core and membrane with scissors or a knife.
- SPRINKLE each half of grapefruit with $\frac{1}{2}$ t. sugar, each half orange with $\frac{1}{4}$ t. powdered sugar. (Grapefruit or oranges are very good without any sugar. Some like a little salt on grapefruit. Try it.)
- SERVE on a salad plate, $\frac{1}{2}$ grapefruit or 2 halves of orange for each person.

BROILED GRAPEFRUIT



Sun Maid Raisin Growers

SERVES 4

2 grapefruit	2 T. chopped walnuts
2 T. chopped raisins or dried figs	3 T. strained honey

PREPARE 2 grapefruits as for grapefruit halves.

CHOP 2 T. raisins or figs and 2 T. nuts, and place them in the centers of the grapefruit, dividing them evenly.

POUR 3 T. honey over the chopped fruit and nuts.

BROIL in a slow oven (300° F.) for 15 to 20 minutes or until heated through. Serve at once.

FRUIT CUP

SERVES 4

2 oranges	½ c. berries, cherries, melon balls, or
1 grapefruit	diced pineapple
1 banana	3 T. sugar

WASH the grapefruit and 2 oranges; remove the outer skin and white membrane.

- REMOVE the fruit sections with a sharp paring knife and place them in a bowl.
- REMOVE the outer skin and carefully scrape the rough covering from the banana, and cut the banana in four sections lengthwise. Dice in fairly large pieces (finely cut bananas become mushy); and place under grapefruit and oranges to keep them from discoloring.
- ADD $\frac{1}{2}$ c. berries, or other fruit, and 3 T. sugar; mix lightly and chill.
- PLACE in sherbet glasses and serve as a first course or dessert.

Fruit drinks

SUGAR SIRUP FOR FRUIT DRINKS

2 c. sugar

2 c. water

PLACE 2 c. sugar and 2 c. water in a saucepan and stir well.

BOIL for five minutes. Cool and pour in a glass jar with a tight-fitting lid, and place in the refrigerator for future use.

LEMONADE 1

SERVES 4

$\frac{3}{4}$ c. lemon juice and pulp (about 4 lemons) $2\frac{1}{2}$ c. cold water
ice cubes or cracked ice

$\frac{3}{4}$ c. sugar sirup

WASH the lemons, extract $\frac{3}{4}$ c. juice, remove the seeds, and place the juice in a pitcher.

ADD $\frac{3}{4}$ c. sugar sirup and $2\frac{1}{2}$ c. water. Mix well.

PLACE cracked ice or ice cubes in each glass and add the lemonade; or place ice in the pitcher and then pour the lemonade into the glasses.

SERVE at once.

NOTE: A sprig of mint from your garden, a lemon slice, or a maraschino cherry may be added for color.

LEMONADE 2

SERVES 4

$\frac{3}{4}$ c. lemon juice (about 4 lemons) $\frac{3}{4}$ c. sugar or $\frac{1}{2}$ c. sugar plus $\frac{1}{4}$ c.
3 c. cold water white karo

WASH the lemons, extract $\frac{3}{4}$ c. juice, remove the seeds and place the juice in a pitcher.

ADD $\frac{3}{4}$ c. sugar and 3 c. cold water, and stir until the sugar is dissolved.

PLACE ice in each glass and add the lemonade; or place ice in the pitcher and then pour the lemonade into glasses.

SERVE at once.

Recipes for gelatin dishes

MOLDED FRUIT SALAD

SERVES 4-6

1 c. apples, cubed	$\frac{1}{4}$ c. cold water
1 c. grapefruit, cut in pieces	2 T. lemon juice
1 c. oranges, cut in pieces, with juice	$\frac{1}{2}$ c. boiling water
$\frac{1}{3}$ c. pecans, broken in small pieces	$\frac{1}{2}$ c. sugar
$1\frac{1}{2}$ T. plain gelatin	

PREPARE 1 c. grapefruit and 1 c. orange.

SOAK $1\frac{1}{2}$ T. plain gelatin in $\frac{1}{4}$ c. cold water for five minutes.

WASH and cut 1 c. apples in cubes (do not remove skin), and add to the other fruit.

DISSOLVE $\frac{1}{2}$ c. sugar and the gelatin in $\frac{1}{2}$ c. boiling water.

COMBINE the fruit, 2 T. lemon juice, and $\frac{1}{3}$ c. pecans with the gelatin mixture. Cool slightly.

POUR into one large mold or individual molds that have been rinsed in cold water, and chill.

ARRANGE on salad greens, and serve with fruit salad dressing.

CHERRY DELIGHT

SERVES 4-6

1 box cherry jello 2 c. warm water

PLACE the jello in a bowl and add 1 c. warm water. Stir until dissolved.

COOL until the mixture begins to thicken; then place the bowl in cracked ice and beat the mixture until it becomes fluffy and has the consistency of whipped cream.

PILE lightly into sherbert glasses and chill until firm.

NOTE: Citrus fruits may be added to this jelly.

LEMON JELLY

SERVES 4

1 T. unflavored gelatin	6 T. sugar
$\frac{1}{2}$ c. cold water	$\frac{1}{4}$ c. lemon juice
1 c. boiling water	F. G. salt

SOAK 1 T. unflavored gelatin in $\frac{1}{2}$ c. cold water for five minutes.

EXTRACT $\frac{1}{4}$ c. lemon juice.

ADD	gelatin, 6 T. sugar, and F. G. salt to 1 c. boiling water, and stir until dissolved.
ADD	lemon juice, pour into one large or four small molds that have been rinsed in cold water, and chill.
UNMOLD	and place on a plate, and garnish with sections of oranges or fresh berries.

TOMATO ASPIC SALAD

SERVES 4

2 c. tomato juice or juice from
canned tomatoes
1 slice medium-sized onion
1 whole clove
small piece bay leaf
 $\frac{1}{2}$ t. salt
2 T. unflavored gelatin
2 T. sugar
 $\frac{1}{4}$ t. paprika
 $\frac{1}{4}$ c. cold water
2 T. mild vinegar or lemon juice

PLACE 2 c. tomato juice, 1 slice onion, 1 clove, piece of bay leaf, and ½ t. salt in a saucepan; cook for ten minutes, and remove from heat.

SOAK 2 T. gelatin in $\frac{1}{4}$ c. cold water for five minutes.

ADD 2 T. sugar, $\frac{1}{4}$ t. paprika, and the gelatin to the tomato mixture and stir until dissolved; strain.

RINSE the salad mold or individual molds in cold water and pour in the tomato mixture. Chill in the refrigerator until firm.

UNMOLD and place on the salad greens; garnish with mayonnaise or cooked salad dressing. Celery curls and carrot strips add variety and look very attractive.

Salad accompaniments

TOAST

day-old bread soft butter or fortified margarine

CUT the bread $\frac{1}{4}$ inch thick or use ready-cut bread.

PLACE on the broiler pan or in a toaster for one minute and turn to the other side. This prevents curling of bread.

BROWN . on both sides and butter. *Do not* pile one slice on top of another as it will become soggy.

SERVE at once.

NOTE: Toast sticks are made by cutting bread in strips before toasting.

CINNAMON TOAST 1

4 slices day-old bread, ¼ inch thick	3 t. sugar
soft butter	1 t. cinnamon

MIX 3 t. sugar and 1 t. cinnamon.
 TOAST 4 slices of bread to a golden brown, and butter.
 SPRINKLE the cinnamon mixture on the buttered toast; cut the slices in halves or thirds and serve at once.

CINNAMON TOAST 2

4 slices day-old bread, $\frac{1}{4}$ inch thick 3 t. sugar
 soft butter 1 t. cinnamon

MIX 3 t. sugar and 1 t. cinnamon.
 TOAST one side of the bread until golden brown.
 SPREAD with soft butter on the untoasted side, sprinkle with cinnamon, and place under the broiler (250° F.) until the mixture is melted.
 CUT the slices in halves or thirds and serve at once.

TOASTED MUFFINS, ROLLS, OR BISCUITS

CUT the muffins, rolls, or biscuits in half; place on a baking sheet with the cut side down; and toast under the broiler until brown.
 TURN and toast the other side until delicately brown.
 NOTE: This is an excellent way to use leftover breads for breakfast or as an accompaniment with salads.

COCOA

SERVES 4

$3\frac{1}{2}$ c. milk 8 t. sugar
 4 t. cocoa $\frac{3}{4}$ c. water
 F. G. salt

PLACE in a saucepan 8 t. sugar, 4 t. cocoa, F. G. salt, and $\frac{3}{4}$ c. water. Mix well and boil for 3 minutes.

ADD $3\frac{1}{2}$ c. milk and heat over a low flame. Do not boil. Serve hot.

CLASS ACTIVITIES

1. What other dishes besides fruit juice cocktails, fruit cups, and salads include citrus fruits among the ingredients? For example, orange sherbert and orange marmalade include oranges as one ingredient. Examine cook-books for recipes which include citrus fruits. Which recipes use enough citrus fruit to be considered vitamin C dishes?

2. Study the different types of fruit juice squeezers and point out the advantages and disadvantages of each type.

3. Discuss names for citrus fruit salads. You may have fun making up catchy names for vitamin C dishes, such as Golden Special for orange jelly or Vitabite Medley, meaning "take a bite of a vitamin C mixed-fruit salad."

4. Trace the story of the orange from the tree to your table. Growing, picking, sorting, packing, shipping, and handling in the local markets all contribute to the cost of a dozen oranges.

5. Compare the costs of oranges and grapefruit when bought in small amounts locally and when purchased by the crate from the producer and shipped directly to your home.

6. What is your favorite vitamin C dish? Compare the preferences expressed by other members of the class.

7. Compare the costs and flavors of canned orange juice and grapefruit juice with the fresh fruit juices.

8. Learn to make good lemonade and other fruit juice beverages. Entertain your mothers, the P.-T. A., or some other group at a tea party; and serve lemonade or another fruit juice beverage and melba or cinnamon toast.

9. Try out other gelatin desserts, such as lemon jelly.

10. Make some orange marmalade and save it for a winter breakfast.

11. Try broiled grapefruit for dessert.

FUN WITH FOOD AT HOME

1. Ask your mother for permission to prepare and serve a citrus fruit every day for a week. Plan to serve a different food each day and to serve your citrus fruit for breakfast on some days, for lunch on others (probably Saturday and Sunday), and for dinner on other days.

2. Shop for citrus fruits in at least three different markets. Where do you find the best buys? Explain how you get good value for your money.

3. Bring your recipe collection up to date. Add your favorite recipes for using citrus fruits to your vitamin C recipes.

4. Why is vitamin C important to you?

Without vitamin C in your diet you cannot live. If the substance which we call vitamin C should be entirely lacking in your food and you did not receive it through pills or capsules, you would become ill with a disease known as scurvy, and within a few months you would die. Fortunately, there are many foods which contain vitamin C, and you are not likely to contract this dread disease. The average American diet contains enough vitamin C to prevent severe scurvy. However, there are many people who do not get enough vitamin C and suffer resulting illness. Everyone should know why this vitamin is so important to health and how to get enough of it in his daily food.

What is vitamin C? Until 1932 no one knew the true identity of vitamin C. It was an intangible substance which had eluded scientists

for centuries. The fearful disaster which follows the lack of this important substance in the diet was well known. People had learned that certain foods, such as the citrus fruits and tomatoes, were a good source of this mysterious and all-important food element; but it was not until 1932 that Dr. King at the University of Pittsburgh separated this strange substance from lemon juice and discovered its identity. The chemical name for vitamin C is ascorbic acid. Other names which you may see are antiscorvy acid, antiscorbutic acid, and cevitamic acid.

All these names are impressive and you may like to know them; but you may feel that vitamin C is the nicest name for this all-important food substance because this name is derived from the Latin word *vita*, meaning "life."

A deficiency of vitamin C means trouble. Although cases of severe scurvy are rare in the modern world, there are thousands of cases of poor health which can be traced to a *mild deficiency* of vitamin C. Much distress and suffering can be avoided if we learn how to include enough vitamin C in our everyday meals.

Our bodies are made up of millions of tiny cells which are much too small to be seen with the naked eye. All these cells are held together by a cement-like substance which is spoken of as connective tissue. Vitamin C is an essential aid in maintaining this strong cement-like material between the cells.

Have you seen a workman mix cement, sand, and gravel for a concrete wall? It is the cement which holds the wall together. Just as the concrete wall is held together by cement, the connective tissues of the body are held together by vitamin C. If there is not enough cement in the concrete wall, the sand and gravel will crumble; and if there is not enough vitamin C in the body, the tissues of the body are weakened and cannot keep the cells properly set for their work in the body.

The walls of all the blood vessels in the body depend upon vitamin C for strength and elasticity. If there is a deficiency of this vitamin, the walls of the tiny capillaries are the first to break down, and blood seeps through them into the tissues. Are you one of the people who bruises easily when you receive a small bump? This happens when the supply of vitamin C is low, because the walls of the capillaries are weak and cannot stretch or resist the blow. The blood is dumped into the tissues instead of reaching the cells which it was intended to nourish. Remember that a bruise is always an invitation to infection.

"Pink toothbrush" is another indication of easily broken capillaries. Healthy gums fit tightly around the roots of the teeth and do not bleed

even though they are brushed vigorously. Hemorrhages through the capillary walls may occur in the bones, in the teeth, in the joints, or in the intestinal walls. Teeth may decay and die; pyorrhea may attack the teeth; bones break easily; joints may become enlarged and stiffen; "growing pains" may distress young people; or anemic conditions may develop when there is even a partial deficiency of vitamin C.

Too little vitamin C can result in fatigue and lack of energy. It helps to produce energy in the body by carrying hydrogen away from the breakdown of foods; and if there is not enough of it in the bloodstream, then the level of energy is lowered. Probably spring fever is induced by a prolonged deficiency of vitamin C during the winter months.

Another function of vitamin C is helping the body to resist infections. People whose bodies contain an adequate amount of vitamin C are much better able to fight colds, influenza, nose and throat infections, rheumatic fever, and lung infections.

Even a mild lack of vitamin C leads to trouble. It is not difficult to fortify yourself against the dangers caused by a deficiency of vitamin C. Make a habit of eating vitamin C foods every day. This is not a difficult nor disagreeable thing to do, because the vitamin C foods are easily obtained, simply prepared, and good to eat.

Fruits and vegetables provide vitamin C in the diet. Citrus fruits, tomatoes, and greens are rich in vitamin C content and take the lead in supplying ascorbic acid in the average American diet. They are popular foods and most desirable from the standpoint of health. There are many other foods, chiefly fruits and vegetables, which also provide vitamin C. Turn to the tables on pages 62 and 63, called "How Fresh Fruits and Vegetables Rate in Food Value," and you will find that the foods which are excellent sources of vitamin C are indicated by three-star ratings; those which are good sources have two-star ratings; and those which are only fair sources have a one-star rating. Nineteen fruits and vegetables are given three-star ratings, 23 have two-star ratings, and 21 have one-star ratings. Obviously, it is not difficult to find foods which contain vitamin C.

Probably you will not remember all 63 vitamin C fruits and vegetables which are listed in the table, but you should remember at least five of those which are excellent sources and five of those which are good or fair sources. You can surely remember those which you eat most frequently.

How much vitamin C do you need every day? Scientists have established the daily minimum requirements for vitamin C in terms of milligrams and International Units. Since we cannot tell, by tasting or



Sunkist

Vitamin C is not hard to take in such attractive and delicious salad plates.

looking at a tomato, just how many milligrams or International Units of vitamin C it contains, we need a more practical way of judging whether we get enough vitamin C in our everyday meals. Nutrition experts advise one serving every day of a food which is rich in vitamin C. Of course, not many people will choose to eat 100 sprigs of parsley or care to drink a half cup of lemon juice daily, but a serving of one of the other three-star foods will please the appetite. A half grapefruit, an orange, a 4-ounce glass of orange juice, a serving of brussel sprouts or strawberries will give the minimum daily requirement of vitamin C.

Two average-sized servings of the two-star or one-star vitamin C foods will also give you your minimum daily requirement of vitamin C. Since there is not much danger from overeating of vitamin C foods, it is a good idea to include more than the minimum daily requirement.

Vitamin C is easily lost. This delicate vitamin is easily lost in air and in water, and many foods lose much of the vitamin C content before they reach the table. Fruits or greens which are kept for a period of time at room temperature will lose a great deal of vitamin C, but little is lost if they are kept in the refrigerator. If they are bruised or crushed in handling, the vitamin C content is lost much more quickly. Finely chopped foods, such as cole slaw, lose vitamin C rapidly.

Vegetables lose a great deal of their vitamin C through improper

HOW FRESH FRUITS RATE IN FOOD VALUE

*** Excellent ** Good * Fair Less than fair (no entry)

Per 100 grams of raw food, edible portion										Per 100 grams of raw food, edible portion									
Approximate measure equivalent to 100 grams of food ¹	Vita-min A value	Vita-min C	B vitamins		Cal-cium	Iron	Cal-ories	Approximate measure equivalent to 100 grams of food ¹	Vita-min A value	Vita-min C	B vitamins		Cal-cium	Iron	Cal-ories				
			Thia-mine	Ribo-flavin							Thia-mine	Ribo-flavin							
Apples.....		*					65	Guavas.....		***					80				
Apricots.....	***						55	Lemons.....		***				*	45				
Avocados.....		*					265	Limes.....		**					55				
Bananas.....		*					100	Mangoes.....	**	**					75				
Blackberries (or dewberries)...	3/4 cup.....	**		(2)			60	Oranges.....		***					50				
Blueberries (or huckleberries).	3/4 cup.....	*					70	Papayas.....	**	***					45				
Cantaloups (or muskmelons)..	1/4 melon, 5" diameter or 1/2 cup balls, 5/8" diameter.....	**					25	Peaches.....	*	*					50				
Cherries.....	3/4 cup.....	*					70	Pears.....		***					70				
Cranberries....	1 cup.....	*					55	Persimmons (Japanese)...	**	**					85				
Currents (fresh)	3/4 cup.....	**		(2)			60	Pineapple.....		**					60				
Dates.....	12-15.....	**		(2)			315	Plums.....		**					55				
Figs (fresh)....	2-3 large.....	**	(2)	(2)		*	90	Raspberries...		*					75				
Gooseberries...	3/4 cup.....	**					45	Rhubarb.....		***					20				
Grapefruit.....	1/2 medium.....	***					45	Strawberries...		**					40				
Grapes.....	1 bunch of 20-25 grapes.....						75	Tangerines....	*	**					50				
								Watermelons..							30				

HOW FRESH VEGETABLES RATE IN FOOD VALUE

Asparagus.....	6 stalks, 5" long...	*	**	*				25	Lettuce, all other.....	**	*				*	20
Beans, lima, green.....	2/3 cup.....		**	*			*	130	Mustard greens.....	***	***	*		**	*	30
Beans, snap, green.....	3/4 cup, 1" pieces..	*	**				*	40	Okra.....	*	**			*		40
Beet greens....	1/4 pound.....	***	**		(³)		**	35								

Beets	2 beets, 2" diameter or $\frac{2}{3}$ c. cubes	*	*	*	*	45	Onions, mature	2 medium	*	(2)	*	50
Broccoli	$\frac{1}{4}$ pound	***	***	*	*	35	Parsley	1 bunch, 5" diameter, approximately 100 sprigs. 1 small	***	(2)	**	60
Brussels sprouts.	7 sprouts, 1 $\frac{1}{2}$ " diameter	***	***	*	*	60	Parsnips	$\frac{3}{4}$ cup	*	*	*	85
Cabbage	$\frac{1}{4}$ pound	***	***	*	*	39	Peas, green	$\frac{3}{4}$ cup	***	*	*	100
Carrots	2 carrots, 4" long or 1 c. grated	***	***	*	*	45	Peas, field or cowpeas (immature seeds).	$\frac{3}{4}$ cup	*	*	*	135
Cauliflower	$\frac{1}{8}$ small head, 4 $\frac{1}{2}$ " diameter	***	***	*	*	30	Peppers	1 large	***			30
Celery	6 stalks, 7" long	*	*	(3)	*	20	Potatoes, white	1 small	***			85
Chard (leaves and stalks)	$\frac{1}{4}$ pound	***	***	*	*	25	Pumpkin	$\frac{1}{2}$ c. diced	*			35
Collards	$\frac{1}{4}$ pound	***	***	*	*	50	Radishes	10 red button	***		*	20
Corn, sweet, all.	1 ear, 8" long or $\frac{1}{2}$ cup	*	*	*	*	110	Rutabagas	$\frac{3}{4}$ c. cubes	***	*	(3)	40
Cucumbers	14 slices, $\frac{1}{8}$ " thick, 1 $\frac{1}{2}$ -2" diameter	*	*	*	*	15	Spinach	$\frac{1}{4}$ pound	***		*	25
Dandelion greens	$\frac{1}{4}$ pound	***	***	*	*		Squash, summer	$\frac{3}{4}$ cup	*			20
Eggplant	1 slice, $\frac{3}{4}$ " thick and 4" diameter or 1 c. cubes	***	***	*	*	50	Squash, winter	$\frac{1}{2}$ cup	***			45
Endive	$\frac{1}{4}$ pound	***	***	*	*	30	Sweetpotatoes	$\frac{2}{3}$ medium	***			125
Kale	$\frac{1}{4}$ pound	***	***	*	*		Tomatoes	1 small. 3" diameter	*			25
Lettuce, headed	$\frac{1}{3}$ of 10-ounce head 3"-4" diameter	*	*	*	*	25	Turnip greens	$\frac{1}{4}$ pound	***	**	*	35
		***	***	*	*	50	Turnips	$\frac{3}{4}$ c. cubes	***	**	*	35
		*	*	*	*	20	Watercress	1 bunch, 3" long and 3" diameter	***	*	*	25

From the Bureau of Human Nutrition and Home Economics

¹ Approximate measures are compiled from various sources.

² Data are insufficient to rate the food as a source of this nutrient.

³ Calcium may not be available because of the amount of oxalic acid present.

Ratings Excellent, Good, Fair, as used in this table, are based on the dietary allowances of nutrients for a moderately active man, recommended by the National Research Council in August 1945. To rate Excellent, a raw food provides at least 50 per cent of the daily allowance for each nutrient; Good, 25 per cent; Fair, 10 per cent. Ratings do not take into account losses of vitamins or minerals that may occur during cooking, cutting, or other preparation.

cooking. They should be cooked as short a time as possible and started in a small amount of boiling water. Too-long cooking generally results in a total destruction of the valuable ascorbic acid content. Since so much vitamin content is left in the vegetable water, we should make every effort to use it in soups or sauces.

The vitamin is not so easily lost in the presence of acid. The citrus fruits and tomatoes retain their vitamin C better than the nonacid foods. Commercial canning destroys 50 to 85 per cent of the ascorbic acid in asparagus, spinach, beans, and peas; but only 10 to 30 per cent is lost from canned grapefruit and orange juice, and still less from canned tomato juice.

Good rules for saving vitamin C are:

1. Use foods directly from the garden when possible.
2. Store foods at low temperatures.
3. Cook foods in small amount of boiling water, and use the vegetable water in soup or other ways if possible.
4. Cook foods for as short a period of time as possible.
5. After vegetables begin to boil, reduce the heat.

Your own supply of vitamin C. What does vitamin C mean to you personally? Can you answer all the quiz questions about it? Can you plan the family menus for a week and include adequate vitamin C in the daily food? Can you prepare food properly so as to conserve the vitamin C content? All these things are important. Your understanding of vitamin C foods and your ability to prepare them constitute the first step in your successful mastery of this food study.

Most important of all are your personal habits with regard to vitamin C foods. Do you eat enough vitamin C foods? Every day?

CLASS ACTIVITIES

1. Check up on your vitamin C eating habits for one week. Record all the foods which you eat that are listed as one-, two-, or three-starred foods in the tables on pages 62 and 63. Can you honestly say that you ate an adequate amount of ascorbic acid every day?
2. What are the best buys in vitamin C foods which are not plentiful in your markets?
3. Compare the cost of vitamin C pills for one week and the cost of vitamin C foods for the same period. Remember that the foods have other values in the diet.
4. Plan a diet with adequate vitamin C for a sick person who is allowed no raw foods, for a person who is allowed no citrus fruits.

5. What instances of waste of vitamin C have you seen in your own home or in other places?

6. If the family food budget cannot cover the cost of citrus fruits, what can the homemaker substitute for vitamin C foods?

A SUMMARY OF YOUR STUDY OF THE VITAMIN C FOODS

You should have learned certain definite facts about nutrition and about buying foods in this unit. You should also have acquired certain abilities in the preparation of food. Giving definite facts, can you discuss each of the topics listed below?

Nutrition

Value of vitamin C
Foods containing vitamin C
Loss of vitamin C

Points on buying

Selection of good tomatoes
Selection of good citrus fruits
Types of oranges and grapefruit

Skills in food preparation

Three types of salad dressings
Arranging salads attractively
Light breakfast with citrus fruit
Tomato salads
Citrus fruit salads
Gelatin salads

WHAT DO YOU KNOW ABOUT VITAMIN C FOODS?

The following questions will test your knowledge of vitamin C foods, including their health value, preparation, use in menus, selection in the markets, storage, and preservation.

To test for related ideas

Each term in the first column is related in thought to a term in the second column. On a separate sheet of paper write the pairs of terms which belong together. Do not write in this book.

Salad
Canning tomatoes
Valencias
French salad dressing
Wide mouth
Buying citrus fruits
Vitamin C
Loss of vitamin C

Ascorbic acid
Cold and crisp
Long boiling time
Vinegar and oil
By the pound
Mason jar
Juice oranges
Boiling-water bath

To test your knowledge of vitamin C

Which of the following statements are true? On a separate sheet of paper write the number of each question, and opposite the numbers write the letters (*a, b, etc.*) to indicate the correct answers. **Do not write in this book.**

1. Everyone needs an adequate amount of vitamin C in the diet because (a) It helps to prevent throat and lung infections. (b) It prevents rickets. (c) It strengthens the walls of blood vessels. (d) It aids the formation of red blood corpuscles. (e) It aids good tooth and bone formation.

2. A mild deficiency of vitamin C may cause (a) pink tooth brush (b) appendicitis (c) claustrophobia (d) spring fever (e) scarlet fever (f) hay fever.

3. Which of these fruits and vegetables contain at least fair amounts of vitamin C? (a) grapes (b) strawberries (c) oranges (d) tomatoes (e) spinach (f) grapefruit (g) avocados (h) limes (i) watermelon (j) water cress

To test your knowledge of preparing and serving a salad

Supply the missing words in each sentence. On a separate sheet of paper write the number of each question, and opposite the number write the word or phrase that is missing in each case. **Do not write in this book.**

1. A tomato stuffed with chicken salad and served with a rich dressing is suitable for a _____ at a luncheon or supper.

2. Sliced tomatoes or fruits should be drained so that the salad will not be _____.

3. Salad greens should be _____ and _____ at least two hours before they are needed.

4. When a fork is the only table silver needed, it should be placed at the _____ of the plate.

5. The napkin is correctly placed at the _____ of the plate.

REFERENCES FOR FURTHER READING

Amidon, E. P., Bradbury, D. E., and Drenckhahn, V. V., *Good Food and Nutrition*. John Wiley and Sons, Inc., 1946. Pp. 23-25, 40-41, 235-248.

Davis, Adelle, *Vitality Through Planned Nutrition*. The Macmillan Company, 1942. Pp. 219-245.

Harris, J. W., and Speer, E. L., *Everyday Foods*. Houghton Mifflin Company, 1946 and 1941. Pp. 207-214, 485-489.

Silver, Fern, *Foods and Nutrition*. D. Appleton-Century Company, Inc., 1941. Pp. 80-89, 295-302.

2

Hearty Vegetables and Fruits

Food that “sticks to the ribs” is always popular with people who are energetic and active. Fuel food is necessary to keep the body in good working condition and at a high level of energy. The body is like a machine; it needs fuel to keep it going. An automobile will not run unless it has gasoline, and the human body cannot keep going unless it has an adequate supply of fuel in the form of food.

The foods in Group Three on the Basic Food Chart, page 9, are good fuel foods, and nutrition experts recommend that we eat at least *two servings every day*. The fuel value for fruits and vegetables is given in the last column of the tables on pages 62 and 63 under the heading, “Calories.” A calorie is the standard measure of the amount of energy produced by food in the body. Some foods produce more energy than others, so we say that they have a high calorie count. As you look down the columns headed “Calories,” you will see that some fruits and vegetables have a much higher calorie count than others. Notice that one small apple has greater energy value than three apricots, and lima beans have much greater fuel value than green snap beans. In this chapter we are concerned chiefly with the energy value of fruits and vegetables, but we should not forget that these foods are also important for other values—such as vitamin C in some cases. For example, sweet potatoes are high in energy and also in Vitamin C content.

Our study of the hearty fruits and vegetables will include their use in dinner and luncheon menus. Cream soups, scalloped, buttered, baked, and creamed vegetables are good ways of providing wholesome dishes for everyday meals. Potatoes are usually included in the dinner menu as the hearty vegetable, but peas, beans, corn, and some other vegetables may be used instead.

1. How do you like your vegetables: baked, boiled, creamed, or scalloped?

Vegetables can be prepared in many ways to please the appetite. The well-known white potato is an especially versatile vegetable. It can be prepared by boiling, steaming, baking, or frying; and it can be served whole or mashed, with butter or cream sauce, and in various other ways. It may appear in salad, soup, as an accompaniment to the meat course, or as a main dish. Everyone should know how to prepare these dishes efficiently and perfectly. The sweet potato is a very good source of energy and makes an excellent hearty vegetable.

Select your potatoes with care. Serving good mashed potatoes or good baked potatoes begins with their selection in the market. Good white (Irish) potatoes are clean and smooth with skins that are hard to rub off. They are solid and firm. Their skins may vary in color from very light cream, through yellowish-brown shades, to russet red, depending upon the variety. Avoid potatoes with green spots as this indicates sunburn, which causes a slightly bitter taste and waste in preparing the potatoes. Avoid potatoes with cuts, scabby skins, wormholes, sprouts, and other injuries.

Symmetrically shaped potatoes are more economical and easier to peel than those with irregular shapes and knobby bumps. Those with shallow eyes are also more economical than those with deep-set eyes which require deeper cuts with the paring knife.

The presence of blackheart or hollow heart in the potatoes cannot be detected except by cutting the potato open. Before buying a large quantity such as a 100-pound sack, it is advisable to buy a small quantity to test by cooking. Potatoes blemished with dark spots in the center or with discolorations through other sections are most undesirable.

Select the type of potato which is best suited to your purpose. If you wish to have baked potatoes, try to obtain the kind which is sold as a baking potato. Other potatoes can be baked successfully, but the baking variety is especially adapted to this cooking process. New potatoes (early crop) are always small and have thin skins which scrape off easily. These are adapted to boiling but not to baking or mashing. Avoid new potatoes which are smaller than $1\frac{3}{4}$ inches in diameter, as they are tedious to prepare and not economical to buy. Old potatoes (late crop) are better adapted for use as mashed potatoes or in scalloped dishes.

The potato is one of the few vegetables which is likely to be sold in the retail market under a U. S. grade name. Very often you will find a

sack of potatoes labeled U. S. No. 1. This means that the producer has graded his potatoes according to U. S. standards and that you can depend upon a good quality of potatoes. No. 1 potatoes are good potatoes but not the best quality. There are two better grades, U. S. Fancy and U. S. Extra No. 1. Further discussion of graded qualities in fruits and vegetables will be found on pages 460 and 461. Good sweet potatoes have smooth, firm skins with no signs of decay or mold. Avoid sweet potatoes with wrinkled ends, as this is a sign of an old potato.

Potatoes for dinner: baked, boiled, or mashed. Potatoes have long been a staple food in the average American diet, so it is not necessary for most of us to form a new eating habit in order to include potatoes in the diet. Probably, white potatoes are most frequently served baked, boiled, or mashed. Sweet potatoes are frequently served baked, glazed, or candied.

Our problem here is to learn how to prepare them so that they are as appetizing and attractive as possible. A food which is so popular deserves to be prepared and served perfectly. Who wants to eat soggy baked potatoes, watery boiled potatoes, or lumpy mashed potatoes? Learning to prepare and serve potatoes perfectly requires skill and knowledge of vegetable cookery. Following are some basic directions for the preparation of potatoes.

Directions for boiled potatoes. The preparation of boiled potatoes is an often-repeated process in the average kitchen, and the cook soon memorizes the important steps without reference to a recipe book. Here are some essential points which are helpful to the novice cook.

1. Select as many potatoes as required for the number of people to be served. Estimate the amount required for each serving.

2. Scrub the potatoes with a brush, and remove defects with a sharp, pointed paring knife.

3. Pare the potatoes thinly. A parer is helpful in keeping the peelings thin. If desired, cook the potatoes in their jackets. This saves vitamins from escaping in the boiling water, but the potatoes are difficult to peel while hot.

4. Do not cut potatoes in small pieces before boiling as this increases the loss of vitamins. All the potatoes should be about the same size so that they will cook through in the same length of time. If it is necessary to boil large and small potatoes together, then cut the large ones in two or three pieces to correspond in size with the small ones.

5. Cook immediately in a small amount of salted water. The water need not cover the potatoes. Note the water line shown in the illustra-

tion opposite. The water should be started to boil while the potatoes are being pared. Add $\frac{1}{2}$ to 1 teaspoon of salt. Keep the pan covered to prevent loss of steam.

6. Cook 20 to 40 minutes, depending upon the size. Test with a fork or wire cake tester to see if they are cooked through. Reduce the heat as soon as the water begins to boil. This saves fuel and prevents the boiling water from shattering the outsides of the potatoes.

7. Drain off all water immediately. Never allow cooked potatoes to stand in water, as they soon become soggy. The water which is drained off may be saved for soups and gravies.

8. Shake the pan over heat to give the potatoes an attractive, mealy appearance. See the illustration at the top right on the opposite page.

Note: Steamed potatoes are prepared for cooking in the same way as boiled potatoes. Instead of being put into boiling water, they are put into a steamer above boiling water and are cooked by the steam.

Directions for buttered parsley potatoes. Add butter and chopped parsley to small, new potatoes. Shake over low heat.

Directions for mashing potatoes. This process soon becomes automatic with the cook, and she has no need for a recipe. Study the following directions and pictures. With a little experience, you can learn to prepare perfect mashed potatoes.

1. Boil the potatoes and drain them in exactly the same way as for boiled potatoes.

2. Keep the pan over a low heat and mash the potatoes thoroughly. See the illustration on page 71. Potatoes may also be kept hot in a double boiler.

3. Make a well in the center of the potatoes and add milk (about $\frac{1}{4}$ to $\frac{1}{2}$ cup for five medium-sized potatoes). See the illustrations opposite. Add butter or margarine (about 2 T.) and whip or beat thoroughly. The milk and margarine will heat with the potatoes.

4. Pile the potatoes into a serving dish, and serve immediately.

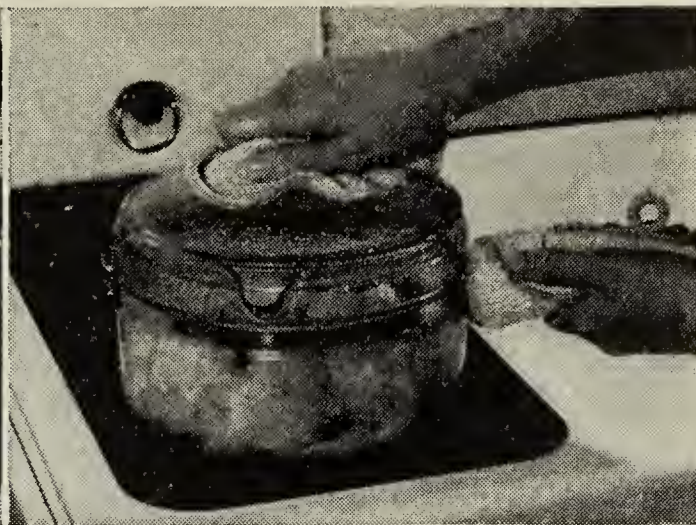
Directions for baking potatoes. This is another process which soon becomes part of the cook's everyday skills.

1. Select the number of potatoes required for serving each person. Remember that new potatoes are not good bakers.

2. Scrub thoroughly with a brush and remove any defects with a knife.

3. Dry and grease lightly.

4. Bake at any temperature from 350° F. to 450° F. for 45 to 70 minutes, depending upon the size of the potatoes and the heat of the oven.



Everyone should know how to prepare good boiled potatoes. *Left:* Use just enough water barely to cover the potatoes. *Right:* When the potatoes are done, drain and shake the pan over low heat.



Do you mash potatoes this way to keep them light and fluffy? *Left:* Mash them thoroughly. *Right:* Make a well in the center of the potatoes and add milk or light cream. Whip until smooth. Keep them over low heat during these operations so that they will stay piping hot.



Better Homes and Gardens Magazine

Baked potatoes are excellent for oven dinners. *Left:* They may be baked with other foods. *Right:* As soon as they are done, make an X cut and add a pat of butter and a dash of paprika.

CLASS PROJECT: SUPPER PLATE WITH POTATO AND GREEN SALAD.

1. Plan a supper plate with potatoes boiled, mashed, baked, or stuffed, a green salad, and a beverage.
 2. Watch a demonstration of the basic processes of boiling, steaming, mashing, and baking potatoes, and stuffing baked potatoes.
 3. Each group in the class should choose the process by which they will prepare their potatoes.
 4. Make a time schedule for preparing and serving the food. The leader of each group should see that this is worked out on paper.
 5. Lay a cover for serving your little supper. The cover should include place mat, napkin, plate, beverage glass, and fork.
 6. Plan for a quick inspection of the supper produced by each group. Which is the most successful? Why? What are the most common faults?
-

SAFETY WARNING: Keep saucepan handles turned in from edge of stove. Use good-sized hot-dish holders.

5. Test for doneness with a fork (long handled).
6. Cut an *X* across the top of the potato and squeeze gently. See the illustration on page 71.
7. Top each one with a small pat of butter or margarine and a dash of paprika.

Stuffed baked potatoes are good. Special treatment for baked potatoes provides an attractive dish with a festive air.

1. Bake the potatoes in the usual way.
2. Lay potatoes on flat side and slice off top third, or cut large potatoes in half.
3. Scoop out the centers and mash thoroughly.
4. Add seasonings, butter, and milk in about the same amounts as for mashed potatoes and whip thoroughly.
5. Pile mashed potato *lightly* into large parts of shells. Sprinkle with grated cheese if desired.
6. Return to oven at 400° F. and bake until tips turn golden brown or until cheese melts.

Variation: If desired, flaked fish may be blended with the mashed potato. The baked stuffed potatoes shown in the picture on the opposite page include flaked salmon in their stuffing.



Libby, McNeill and Libby

Stuffed baked potatoes on the half shell are good to eat and good to look at.

Creamed or scalloped potatoes are good. Potatoes cooked with milk is an excellent way of providing a hearty and satisfying dish. Creamed potatoes and scalloped potatoes are both made with white sauce, one on top of the range and the other in the oven. Study the recipes on pages 76 and 77 to find the similarities and differences in these two dishes.

Directions for making white sauce. White sauce is required in making a great many different kinds of dishes. Every one should learn the basic recipe for white sauce and the different methods of combining the ingredients. The table on the next page gives the ingredients and their amounts for thin, medium, and heavy white sauce. Memorize the proportions for each sauce. Simple mathematics will help you in using it for any recipe requiring white sauce.

There are three different methods of combining the ingredients in white sauce. Everyone who cooks should try each method and decide which one is most satisfactory.

Method 1. Melt the fat in a heavy pan or the top part of a double boiler. Next, add the flour, stirring to a smooth paste. Then add the milk slowly, stirring to keep the mixture smooth. Add salt. Cook slowly until thickened, stirring to prevent lumping. *Book Let the sauce heat gently for 2 m.*



Blue Bonnet Margarine

White sauce added to boiled lima beans or to other vegetables makes a good creamed dish.

Method 2. Mix the flour and about $\frac{1}{4}$ of the milk into a smooth paste. Add the rest of the milk, stirring to keep the mixture smooth. Add salt and fat. Cook slowly, stirring to prevent lumping.

Method 3. Put about $\frac{1}{2}$ cup of milk into a glass jar and drop the flour on top of it. Screw the jar lid tightly. Shake well. Pour the mixture into a saucepan; add remainder of milk, salt, and fat; and cook slowly. Stir to prevent lumping.

PROPORTIONS OF INGREDIENTS FOR WHITE SAUCE

KIND	MILK	FLOUR	FAT	SALT	USE
Thin	1 cup	1 T.	1 T.	$\frac{1}{2}$ t.	Soups
Medium	1 cup	2 T.	2 T.	$\frac{1}{2}$ t.	Creamed or scalloped dishes
Thick	1 cup	3 T.	2 T.	$\frac{1}{2}$ t.	Souffles
Very thick	1 cup	4 T.	2 T.	$\frac{1}{2}$ t.	Croquettes

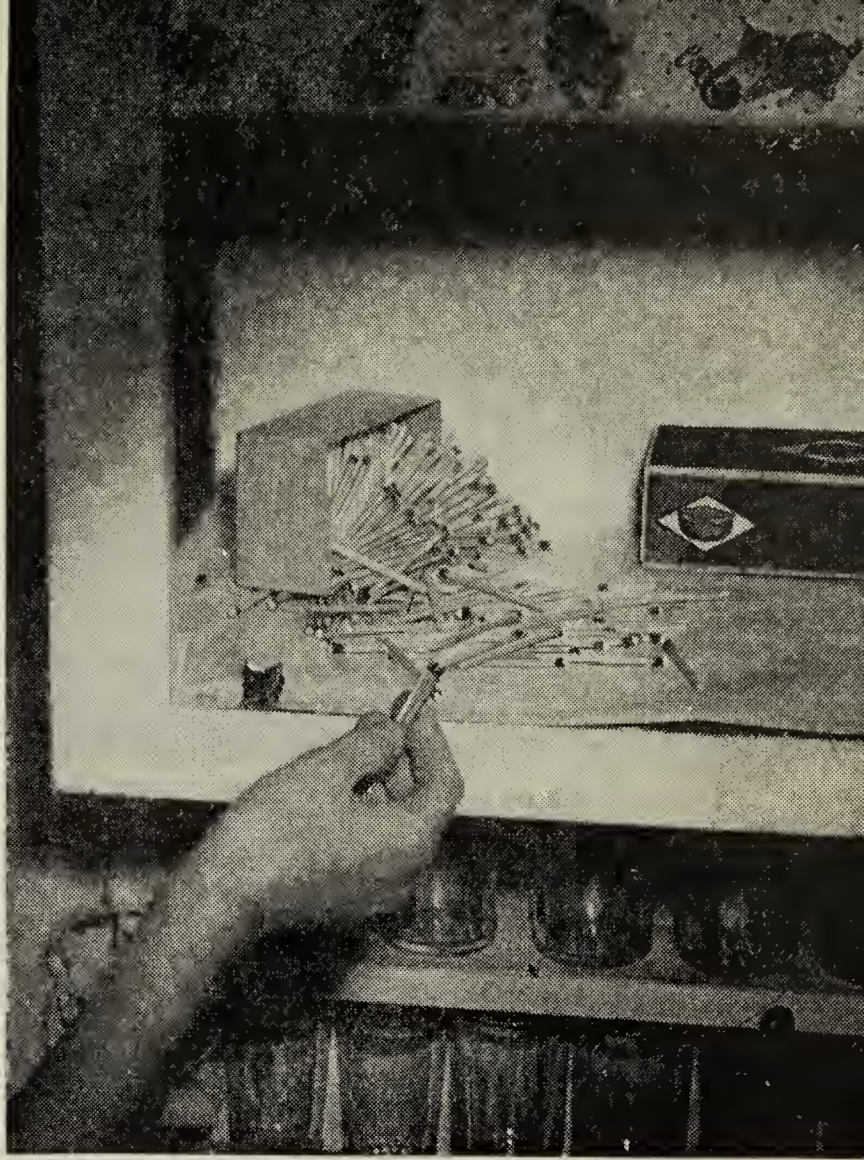
Note: The flavor of white sauce is improved if it is allowed to stand over hot water for a half hour before serving.

Casserole dishes for oven baking. Scalloped vegetables must be baked in a dish which will stand oven heat. *Casserole* is the name generally given to oven-proof dishes used for scalloped potatoes and similar recipes. Some casseroles are glass and some are earthenware. These casseroles can be taken from the oven to the table, thus saving a transfer of the food from the cooking dish to the serving dish. Individual casseroles or ramekins make a delightful way of serving oven dishes.

Standards for judging potato dishes. Judge potato dishes according to the following standards.

1. Are boiled, baked, or steamed potatoes dry, mealy, well done?
2. Is the mashed potato light, smooth, and fluffy? Or is it moist and lumpy?
3. Are the scalloped potatoes of good consistency and well covered with white sauce? Or is the sauce thin and watery?
4. Is the sauce on the creamed potatoes of good consistency? Too thick? Too thin?
5. Are the potatoes done all the way through?

Other vegetables with high calorie content. Lima beans, corn, and peas are other vegetables with a calorie content as high or higher than that of potatoes. You can see their relative values by studying the table on pages 62 and 63. These vegetables can be used very satisfactorily in place of potatoes as the hearty vegetable in dinner or luncheon menus. Many people object to the combination of two of these "starchy" vegetables in the same meal. For example, a baked potato and a large serving of lima beans combine two foods with high fuel value and not much variety in flavor. A baked potato and spinach or lima beans and a grilled tomato make much better combinations.



American Mutual Liability Insurance Company

Never keep matches loose on a shelf.
Avoid the "strike anywhere" matches.
Use safety type matches.

CLASS PROJECT: CREAMED OR SCALLOPED POTATOES SERVED WITH BUTTERED BEETS.

Plan for half of the class to make scalloped potatoes and for the other half to make creamed potatoes.

1. Watch a demonstration of making white sauce (medium) by all three methods.
 2. Observe a demonstration of making creamed potatoes and of making scalloped potatoes.
 3. Study the recipes for creamed potatoes and scalloped potatoes on pages 76 and 77.
 4. Watch a demonstration of preparing buttered beets, and study the recipe on page 82.
 5. Be sure that you know exactly what you are going to do and how you want to do it. Then work fast.
 6. Serve the potatoes and beets on the same plate. What items will you need for laying your cover?
-

Lima beans, corn, and peas can be prepared in several pleasing ways. Buttered vegetables are always good. The vegetable is cooked, drained, and butter, salt, and pepper are added. Peas, either canned or fresh, can be creamed by using part milk and part liquid from the peas. The sauce should be made according to the recipe for medium white sauce. Corn is also very appetizing when creamed. Corn pudding, made with eggs, is a great favorite with many people.

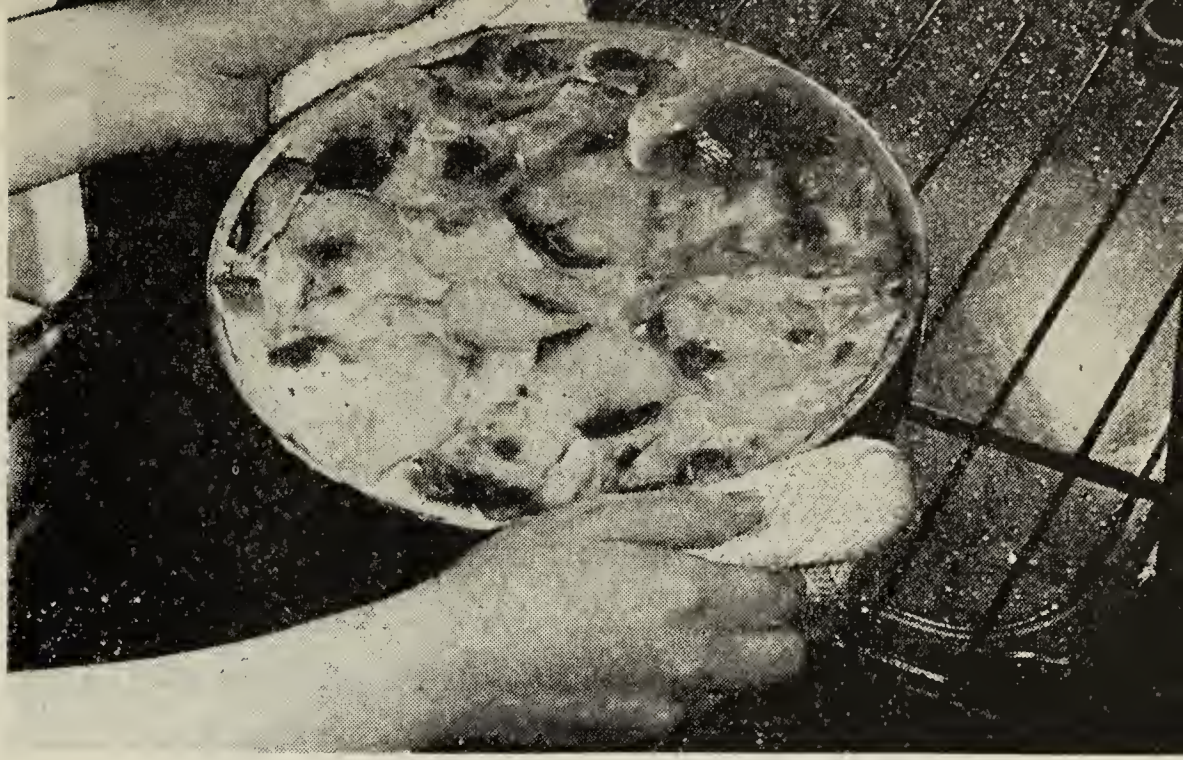
Recipes for vegetable dishes

SCALLOPED POTATOES

SERVES 4

4 or 5 medium potatoes	2 T. butter or fortified margarine
1½ c. medium white sauce, (page 74)	1 t. salt
	1 T. chopped onion if desired
PREPARE	1½ c. medium white sauce. Add 1 t. salt and 1 T. chopped onion.
TURN	oven to 350° F. Grease baking dish.
PARE	4 or 5 potatoes; slice thin one layer at a time in baking dish. Cover with some of the white sauce. Repeat until all potatoes and white sauce are used, having white sauce as topping.
DOT	with 2 T. butter or fortified margarine.
PLACE	in moderate oven (350° F.) and bake from 40 to 50 minutes or until potatoes are soft.

GOLDEN-CRUSTED SCALLOPED POTATOES



Better Homes and Gardens Magazine

The cooking time can be hastened by cooking the potatoes in the white sauce on the top of the range for 5-10 minutes before putting them into the oven. (Note the steps shown in the picture above.)

VARIATIONS: (1) *Au gratin* potatoes are made by the addition of $\frac{1}{2}$ c. grated cheese alternating with white sauce, with cheese as topping. (2) Scalloped potatoes and ham are made by the addition of 1 c. diced ham (leftover), alternating with white sauce, with white sauce as a topping. Or a slice of ham about $\frac{1}{4}$ to $\frac{1}{2}$ inch in thickness may be placed in the bottom of a casserole and scalloped potatoes placed on top, using the method given above.

CREAMED POTATOES

SERVES 4

$1\frac{1}{2}$ c. diced, cold boiled potatoes 2 c. medium white sauce (page 74)
(leftovers)

PREPARE 2 c. medium white sauce in top of double boiler.
 DICE $1\frac{1}{2}$ c. potatoes, place in white sauce, and let stand for 30 minutes.
 HEAT for 15 minutes before serving.
 NOTE: 2 T. chopped parsley added before serving gives color to potatoes. Also, paprika might be sprinkled on top for variation. Leftover peas may be added. Not only does it give color to potatoes, but it is a good way in which to use a few vegetables left from a previous meal.

HASHED BROWN POTATOES

SERVES 4

$2\frac{1}{2}$ c. diced, cooked potatoes (left-overs)	$\frac{1}{4}$ t. paprika
1 t. salt (if not previously salted while cooking)	3 T. bacon drippings
$\frac{1}{4}$ t. pepper	1 t. chopped green pepper
	1 t. chopped onion

DICE $2\frac{1}{2}$ c. potatoes, 1 t. green pepper, and 1 t. onion.
 HEAT 3 T. bacon drippings in frying pan and add diced vegetables, 1 t. salt, $\frac{1}{4}$ t. pepper, and $\frac{1}{4}$ t. paprika; cook slowly for 15 minutes or until well browned on the bottom.
 FOLD over like an omelet with a broad spatula, and serve at once.

POTATO SALAD

SERVES 6-8

5 medium-sized boiled potatoes, cold	$\frac{1}{4}$ t. pepper
$1\frac{1}{2}$ c. diced celery	2 hard-cooked eggs
2 T. chopped parsley	$\frac{1}{4}$ t. celery seed
1 t. finely chopped onion	$\frac{1}{2}$ c., more or less, cooked salad dressing or mayonnaise
$\frac{1}{2}$ c. diced cucumber	lettuce leaves
$1\frac{1}{2}$ t. salt	
$\frac{1}{4}$ t. paprika	

PREPARE cooked salad dressing or mayonnaise, chilled (pages 24 to 27).
 HARD-COOK 2 eggs and chill.
 DICE 5 cold, boiled potatoes, $1\frac{1}{2}$ c. celery, $\frac{1}{2}$ c. cucumber, and 2 eggs.
 CHOP 2 T. parsley and 1 t. onion; add to potatoes with $1\frac{1}{2}$ t. salt, $\frac{1}{4}$ t. paprika and $\frac{1}{4}$ t. celery seed.
 ADD $\frac{1}{3}$ c. salad dressing or mayonnaise and mix gently. Add more dressing and salt if necessary; place in the refrigerator to chill for an hour or more.
 ARRANGE lettuce in salad bowl and pile salad into center. Radish slices make an attractive decoration on top.

TIME TABLE FOR COOKING VEGETABLES ¹

VEGETABLE	BOILING	STEAMING	PRESSURE SAUCEPAN	BAKING
	<i>minutes</i>	<i>minutes</i>	<i>minutes</i>	<i>minutes</i>
Artichoke, French, whole	35 to 45		10 to 12	
Artichoke, Jerusalem, whole	25 to 35	35		30 to 60
Asparagus, whole or butts	10 to 30	12 to 30	$\frac{1}{2}$ to $1\frac{1}{2}$	
tips	5 to 15	7 to 15	$\frac{1}{2}$ to 2	
Beans, lima, green	20 to 30	25 to 35	1 to 2	
Beans, soy, green	20 to 30	25 to 35	1 to 2	
Beans, snap, whole, or 1-inch pieces .	15 to 30	20 to 35	$1\frac{1}{2}$ to 3	
shredded	10 to 20	15 to 25	1 to 2	
Beets, new, small, whole	30 to 45	40 to 60	5 to 10	40 to 60
old, small, whole	45 to 90	50 to 90	10 to 18	40 to 60
Beet greens	5 to 15			
Broccoli, stalks and buds	8 to 20	15 to 20	$1\frac{1}{2}$ to 3	
Brussels sprouts, whole	8 to 18	10 to 20	1 to 2	
Cabbage, green, quartered	10 to 15	15	2 to 3	
shredded	3 to 10	8 to 12	$\frac{1}{2}$ to $1\frac{1}{2}$	
Cabbage, red shredded	8 to 12	10 to 15	$\frac{1}{2}$ to $1\frac{1}{2}$	
Carrots, young, whole	5 to 25	20 to 30	3 to 5	35 to 45
sliced	10 to 20	15 to 25	$1\frac{1}{2}$ to 3	30 to 40
mature, whole	20 to 30	40 to 50	10 to 15	60
sliced	15 to 20	25 to 30	$1\frac{1}{2}$	
Cauliflower, whole	20 to 30	25 to 30	10	
flowerets	8 to 15	10 to 20	$1\frac{1}{2}$ to 3	
Celery, diced	15 to 20	25 to 30	2 to 3	
Chard, Swiss	10 to 20	15 to 25	$1\frac{1}{2}$ to 3	
Collards	10 to 15			
Corn, on cob	5 to 15	10 to 15	0 to $1\frac{1}{2}$	
Eggplant, sliced	10 to 20	15 to 20		
Kale	10 to 20			
Kohlrabi, sliced	20 to 25	30		
Okra, sliced	10 to 20	20	3 to 4	
Onions, small, whole	15 to 25	25 to 35	3 to 4	
large, whole	30 to 35	35 to 40	5 to 8	50 to 60
Parsnips, whole	20 to 40	30 to 45	9 to 10	30 to 45
quartered	20 to 30	30 to 40	4 to 8	
Peas, green	8 to 20	10 to 20	0 to 1	
Potatoes, Irish, medium, whole	25 to 40	30 to 45	8 to 11	45 to 60
quartered	15 to 25	20 to 30	3 to 5	
Rutabagas, sliced	20 to 30	35 to 40	5 to 8	
Spinach:	3 to 10	5 to 12	0 to $1\frac{1}{2}$	
Squash, Hubbard, 2-inch pieces	20 to 30	25 to 40	6 to 12	40 to 60
Squash, summer, sliced	10 to 20	15 to 20	$1\frac{1}{2}$ to 3	30
Sweet potatoes, whole	25 to 35	30 to 35	5 to 8	30 to 45
quartered	15 to 25	25 to 30	6	
Tomatoes	7 to 15		$\frac{1}{2}$ to 1	15 to 30
Turnips, whole	20 to 30		8 to 12	
sliced	15 to 20	20 to 25	$1\frac{1}{2}$	

¹ From *Handbook of Food Preparation*, American Home Economics Association.

A PICNIC OR BUFFET SUPPER

Potato Salad

Bread and Butter Sandwiches

Cold Meat Loaf Sliced Tomatoes

Fruit

POTATO CAKES

SERVES 4

2 c. cold mashed potatoes $\frac{3}{4}$ T. bacon drippings

SHAPE 2 c. potatoes into four uniform cakes about $\frac{1}{2}$ inch thick.

HEAT $\frac{3}{4}$ T. bacon drippings in a heavy skillet; add potato cakes and brown slowly on one side; turn carefully with a broad spatula or cake turner, and brown on reverse side. About 15 to 20 minutes is time required.

NOTE: Add additional fat if needed.

OVEN-BROWNE D POTATOES

SERVES 4

4 medium-sized potatoes 1 c. water

$1\frac{1}{2}$ T. shortening $\frac{1}{8}$ t. pepper

$\frac{1}{2}$ t. salt

SCRUB and peel 4 potatoes and place in 1 c. boiling water with $\frac{1}{2}$ t. salt. Cover and cook for 20 minutes; drain.

TURN oven to 375° F.

MELT $1\frac{1}{2}$ T. shortening in baking pan; brush potatoes with fat; and bake in a moderate oven (375° F.) for 30 minutes or until done.

NOTE: If not brown enough, they may be placed under the broiler for a few minutes.

CANDIED SWEET POTATOES

SERVES 4

4 medium-sized sweet potatoes 3 T. butter or fortified margarine

$\frac{1}{2}$ c. brown sugar 2 T. water

1 t. salt

SCRUB and remove any blemishes from 4 sweet potatoes, and boil until soft. Test for doneness with a fork.

DRAIN and peel and cut lengthwise in half.

MELT 3 T. butter or fortified margarine in a heavy frying pan; add $\frac{1}{2}$ c. brown sugar; and cook until sirup is formed.

PLACE potatoes in sirup; sprinkle with $\frac{1}{2}$ t. salt; and brown on all sides, turning occasionally with a spatula.

ADD 2 T. water, reduce heat, cover and cook from 10 to 15 minutes.

SCALLOPED SWEET POTATOES AND APPLES

SERVES 4-6

2 c. boiled sweet potatoes, cut in 1/4-inch slices	3 T. butter or fortified margarine
1 1/2 c. thinly sliced pared tart apples	1 t. salt
	1/2 c. sugar

TURN oven to 350° F.

REMOVE skins and slice 2 c. potatoes; place half of them in a buttered baking dish.

PEEL apples; quarter and slice 1 1/2 c.; place half of them over potatoes.

SPRINKLE with 1/2 t. salt and 1/4 c. sugar.

ADD the remaining potatoes, apples, salt, and sugar in the same way. Dot with 3 T. butter or fortified margarine.

PLACE in a moderate oven (350° F.) and bake for 1 hour.

MAKE THE OVEN WORK

Scalloped Sweet Potatoes and Apples

Baked Tomato Halves

Broiled Lamb Chops

SWEET POTATOES WITH MARSHMALLOWS

SERVES 4

2 1/2 c. leftover sweet potatoes	1/3 c. milk
1 T. butter or fortified margarine	6 marshmallows

HEAT 2 1/2 c. sweet potatoes, 1 T. butter or fortified margarine, and 1/3 c. milk in top of double boiler.

TURN oven to 350° F.

MASH potatoes, and place in buttered casserole.

TOP with 6 marshmallows cut in half.

BAKE in a moderate oven (350° F.) for 25 minutes or until marshmallows are delicately brown.

SUCCOTASH

SERVES 4

1 c. cooked green lima beans	1/2 c. milk
2 c. cooked corn	3/4 t. salt
2 T. butter or fortified margarine	1/8 t. pepper

PLACE 1 c. lima beans, 2 c. corn, 2 T. butter or fortified margarine, 1/2 c. milk, 3/4 t. salt, and 1/8 t. pepper in a saucepan and simmer for 8 minutes. Serve at once.

FRESH LIMA BEANS OR PEAS

SERVES 4-6

- 2 lb. fresh beans or peas (in pods) $\frac{3}{4}$ t. salt
1 c. boiling water $\frac{1}{2}$ T. butter or fortified margarine
- SHELL beans or peas when brought from the market and store in the refrigerator in a tightly covered glass jar until ready for use.
- ADD $\frac{3}{4}$ t. salt to 1 c. water and bring to boiling.
- ADD beans or peas to water. Reduce heat and cook covered until tender, 12 to 15 minutes. Test with a fork for doneness.
- DRAIN and add $\frac{1}{2}$ T. butter or fortified margarine.
- VARIATION: To cream beans or peas, add 1 cup of medium white sauce (page 74).

BUTTERED BEETS

SERVES 4

- 4 or 5 medium-sized beets $\frac{1}{2}$ t. salt
3 c. water $\frac{1}{2}$ T. butter or fortified margarine
- PLACE 3 c. water and $\frac{1}{2}$ t. salt in saucepan to boil.
- WASH beets; scrub and remove blemishes from beets; cut tops to within $1\frac{1}{2}$ inches of beet; place in boiling water.
- COOK until tender. Time of cooking depends upon size and age of beets.
- PLUNGE in cold water and remove skins.
- DICE or slice beets, and add $\frac{1}{2}$ T. butter or fortified margarine. Serve at once.

PICKLED BEETS

SERVES 4

- 4 or 5 medium-sized beets 3 whole cloves
3 c. water $\frac{1}{4}$ c. vinegar
 $\frac{1}{2}$ t. salt 2 T. water
2 T. sugar
- COOK as directed for buttered beets and remove skins.
- HEAT $\frac{1}{4}$ c. vinegar, 3 cloves, 2 T. sugar, and 2 T. water to boiling. Add sliced, halved, or whole beets and allow to stand for several hours.
- SERVE as a relish or salad.

CORN PUDDING

SERVES 4

- 2 c. drained cooked or canned corn 1 T. butter or fortified margarine
2 c. scalded milk $\frac{1}{8}$ t. pepper
2 eggs, slightly beaten 1 t. salt
 $1\frac{1}{2}$ t. sugar

SCALD milk.
TURN oven to 325° F.
BEAT 2 eggs slightly; add 2 c. corn, 1½ t. sugar, 1 t. salt, ⅛ t. pepper. Mix well.
ADD scalded milk slowly; pour into a buttered baking dish and bake in a slow oven (325° F.) for 30 minutes or until firm.

CLASS ACTIVITIES

1. Many people believe that potatoes contain more calories than any other food and are therefore more fattening. Study the tables on pages 62 and 63, and compare the fuel value of potatoes with the fuel value of other vegetables.
2. What is your favorite style for vegetable dishes: baked, boiled, creamed, or scalloped? Compare preferences with other members of your class.
3. Which method of making white sauce do you prefer? Why?
4. Arrange a lesson on comparing qualities in potatoes. Perhaps each member of the class can bring a potato for this lesson.
5. How would you describe perfect mashed potatoes? What do you think are the usual faults in preparing them?
6. Prepare potato salad. Perhaps you can prepare it for a picnic or an indoor social affair.
7. Make one of the recipes given in the preceding pages, such as corn pudding, succotash, or one of the sweet-potato recipes.
8. Using cardboard food models or colored pictures cut from magazines, make a display of energy-rich foods.

FUN WITH FOOD AT HOME

1. Discuss with your mother the making of white sauce, and try out the method which the two of you think is most satisfactory. What are your conclusions?
2. Plan the evening meals for a week, including a hearty vegetable each night.
3. Start a section in your recipe collection for hearty vegetables.

2. Vegetable cream soups are good

Cream soups are simple to make and especially good for suppers and luncheons. A salad, rolls, and cream soup combination makes an excellent lunch or light supper, especially in cold weather. Because of the many vegetables adaptable for cream soups, there is a wide variety of flavors from which you may choose. Our old vitamin C friend, the tomato, is an excellent choice for this purpose, and tomato cream soup

is very popular. In this unit of study we are concerned with the hearty vegetables, such as corn, peas, and potatoes, and we will find that they make nourishing and delicious cream soups. When you have learned how to make cream soup, using one of these vegetables, it will be a simple matter for you to make cream soup using tomatoes or any other vegetable that you wish to use.

Basic recipe for cream soups. The basic recipe for cream soups is simple and easy to prepare. It includes thin white sauce, sieved or diced vegetable, and seasonings. The general procedure for making a creamed soup is explained in the following steps. When you have mastered this procedure, you should be able to make cream soup without referring to a recipe.

1. Make a thin white sauce according to the method which you like best. Your experience in preparing a creamed vegetable using medium white sauce will help you to make the thin white sauce quickly and perfectly.

Instead of using all milk for the liquid in your thin white sauce, you may wish to use part vegetable water in which the vegetables were boiled or the liquid from canned vegetables. This will add to the flavor of the soup.

2. Prepare the vegetable and add it to the white sauce. Boil or steam the vegetable according to the directions given in the preceding problem. See pages 69 to 71. Peas, potatoes, tomatoes, and beans are pressed through a sieve, resulting in vegetable pulp or puréed vegetable. Cream soups made with vegetable purée [pew-ray'] are sometimes called by that name. For example, purée of peas is only another name for cream of pea soup. Either fresh or leftover vegetables may be used.

Vegetables in cream soups are not always puréed. Celery, mushrooms, and sometimes potatoes and carrots are cut in small pieces or diced. Corn kernels may be left whole.

Cream of tomato soup involves a special problem in combining the ingredients because of the acidity of the tomato. Unless the milk and tomato are combined carefully, the soup may curdle. Some recipes call for a small amount of baking soda to prevent the curdling. Other recipes combine the tomato pulp with the melted butter and flour before the milk is added. Still other recipes add the hot tomato pulp very slowly to the white sauce.

3. Heat to boiling but do not boil. Some cooks recommend the use of the double boiler in order to prevent sticking or scorching.

4. Add seasonings and garnish. Chopped parsley dropped on the top



National Dairy Council

Hold your soup spoon like this, and dip away from you.

of the cream soup and a dash of paprika add greatly to the attractiveness of cream soup as shown above.

Puréed soups are sometimes improved by beating them rapidly with an egg beater just before serving. This is done in the pan before the soup is poured into the bowls. Garnish is added after the soup is poured.

Use of canned vegetables in cream soups. Good and nutritious cream soups can be made from canned vegetables. Naturally, the flavor of the soup will be affected by the way in which the vegetable is prepared. For example, there is a difference in flavor between fresh peas and canned peas, but both are good. The use of canned vegetables is a timesaver for the busy cook. The use of leftover vegetables in cream soups is also a timesaver as well as a good way to conserve food. Leftover mashed potatoes can be used appetizingly in cream potato soup, and leftover garden peas make excellent purée of green peas.

Making croutons or toasted bread sticks. These accompaniments for soup are easily and quickly made. All the rules which apply to the making of toast also apply to the making of croutons. They are best

CLASS PROJECT: PREPARE A CREAM SOUP AND SERVE IT WITH CROUTONS.

Choose one of the hearty vegetables—potatoes, corn, or peas—and prepare a cream soup. Make croutons or toasted bread sticks and serve with the soup.

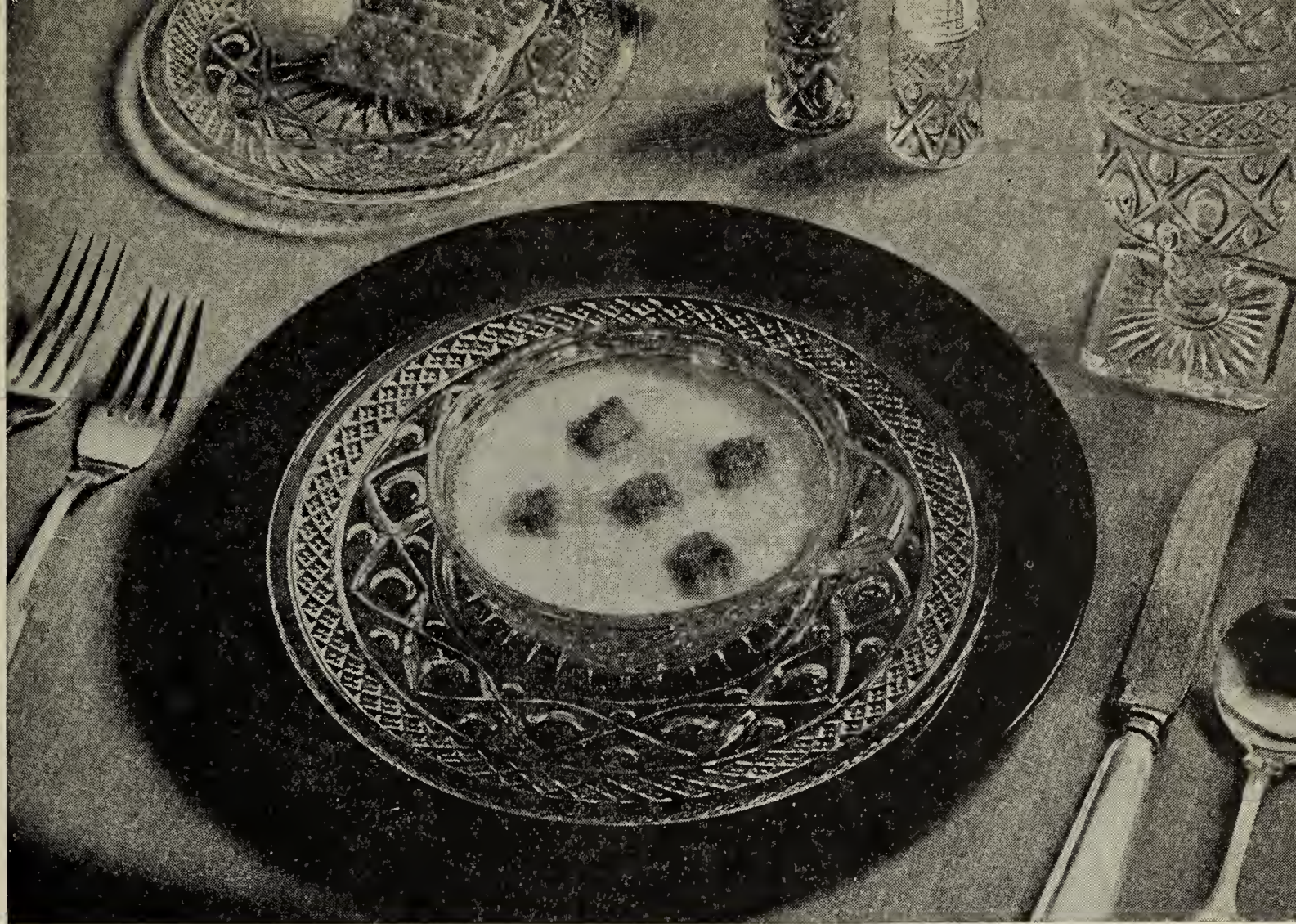
1. Study the general directions given in this unit and the recipes on pages 84 and 85.
 2. Be sure of what you are going to do before the time for doing arrives. You should be able to prepare the cream soup without demonstration first, because there is no difficult process which you have not already seen demonstrated.
 3. Serve the soup and croutons correctly. Criticize your own work according to the standards on page 88.
-

WHEN dry and crisp, so remember to use bread which is at least one day old and to toast them slowly so as to avoid croutons that are toasted only on the outside and are soft inside. Cut the cubes or strips on a board. Never use a sharp knife on a hard, enamel surface because it will ruin the sharp cutting edge.

Serving Soup. Soup may be served in a soup plate, which is a wide, low bowl like the one shown in the picture on page 85, or it may be served in a deeper bowl. When smaller portions are desired, a cup or cereal dish makes a satisfactory container. Special soup cups, called bouillon cups, differ from ordinary teacups in that they have two handles, one on each side. If bouillon cups are not available, teacups or coffee cups can be used with an equally pleasing effect. The large soup plate is the best choice when the soup is the main dish for a luncheon or supper, and the cup is a good choice when the soup is used as the first course of a dinner.

The correct way to lay a cover for a soup luncheon depends upon the other foods which will be served in addition to the soup. A very simple service is shown in the second diagram on page 391. The soup plate is placed upon a service plate, and the soup spoon is laid at the right. The water glass is placed at the tip of the spoon. A bread-and-butter plate with a butter spreader is placed at the left, opposite the water glass. The napkin is placed at the left. A still more simple service is obtained by omitting the bread-and-butter plate and using the edge of the service plate for the soup accompaniment.

The service illustrated on page 87 is laid for a luncheon in which the soup is only the first course. The small bowl or cup and its glass plate will be removed and the service plate retained for the main course.



Imperial Glass Corporation

This is a cover laid for a luncheon in which soup is the first course.

Notice the round bowl of the bouillon spoon. A knife and fork for the main course and a salad fork are required. Notice especially the position of each piece of china, glass, and silver.

The service illustrated on page 89 is laid for a luncheon which requires a knife, fork, and teaspoon in addition to the soup spoon. In this case the soup spoon is laid outside the teaspoon because it will be used first. However, some people prefer to lay the soup spoon next to the knife and the shorter teaspoon on the outside even though the longer spoon is picked up first.

Notice that the arrangement of doilies, napkins, china, and silver is beautifully symmetrical and rhythmic in each of the covers. Rules for setting a table are based on convenient arrangement and good design.

Good table manners for soup eaters! Can you manage your soup spoon correctly? Hold it as shown in the picture on page 85. This is much easier and looks much better than to grab your spoon as though it were a shovel. After all, you are not expected to scrape your dish with it! Fill your spoon by dipping it into the soup in a movement *away from you*. Lift it to your mouth without ducking your head half-way down to your soup dish. If you manage carefully, you can eat your

soup without dripping it into your lap or letting it run down your chin. Need you be reminded that you should eat your soup quietly? No one cares to hear you guzzling over your soup, and you will enjoy it more yourself if you eat it with good table manners.

Do you know how to eat crackers or bread accompaniments with your soup? Never break a handful of crackers into your soup and stir it up into disagreeable-looking mush. Even if you do not mind its messy look yourself, other people will. It is considered good manners to eat your crackers with your left hand while you use your soup spoon with your right hand. In the case of croutons you may drop a few of them on top of your soup and dip them out with your spoon, but do not put a large handful of the croutons into your soup and allow them to soak as you eat your soup. They should be crisp to be really appetizing. Never dip your toast or crackers into the soup. Keep them crisp and you will like them more.

Perhaps you think that good table manners are not important; but if you will spend some time in observation of people at their meals, you will be convinced that good table manners are very important indeed.

Standards for judging cream soups. Evaluate your cream soups according to the points given below.

1. Is the soup smooth, without lumps or grainy quality?
2. Is the consistency good, neither too thick nor too thin?
3. Is the flavor pleasing?
4. Is the soup appetizing in appearance?
5. Is it served hot?

Recipes for cream soups

CREAM OF CORN SOUP

SERVES 4

1½ c. canned or cooked corn	¾ c. milk
2 c. thin white sauce (page 74)	¾ t. salt
1 slice onion	⅛ t. pepper

PLACE 1½ c. corn, 1 slice onion, ¾ c. milk, ¾ t. salt, and ⅛ t. pepper in saucepan and cook at a low heat 15 minutes. Stir occasionally to prevent scorching.

PREPARE 2 c. thin white sauce.

REMOVE onion and force corn through a coarse strainer or food press.
 ADD corn to white sauce.
 SERVE hot, after garnishing with paprika.

CREAM OF TOMATO SOUP



Evaporated Milk Association

SERVES 4

2 c. scalded milk	1 t. salt
2 c. cooked tomatoes	1 T. sugar
1 small onion	3 T. flour
1 bay leaf	$\frac{1}{4}$ t. celery seed
4 whole cloves	2 T. butter or fortified margarine

PLACE 2 c. milk in double boiler to scald.
 SIMMER 2 c. tomatoes, 1 onion, 1 bay leaf, and 4 cloves for 10 minutes.
 REMOVE cloves, onion, and bay leaf and put tomatoes through a sieve.
 MIX 1 T. sugar, 1 t. salt, and 3 T. flour together and blend with tomatoes.
 COOK five minutes, stirring constantly.
 ADD hot milk and 2 T. butter or margarine to tomato mixture and serve at once.
 GARNISH with chopped parsley or croutons.

CREAM OF POTATO SOUP

SERVES 4

2 c. mashed potatoes (leftovers)	$\frac{1}{8}$ t. pepper
2 T. finely chopped onion	$\frac{1}{4}$ t. celery salt
$\frac{1}{3}$ c. water	1 T. chopped parsley
3 c. thin white sauce (page 74)	

COOK 2 T. onion in $\frac{1}{3}$ c. water for 10 minutes.
PREPARE 3 c. thin white sauce; add onion and water.
PUT 2 c. mashed potatoes through a coarse strainer or food press.
ADD potatoes, $\frac{1}{4}$ t. celery salt, and $\frac{1}{8}$ t. pepper to white sauce; and cook over hot water for 10 minutes.
SERVE in soup cups or bowls and sprinkle finely chopped parsley on top.

PURÉE OF GREEN PEA SOUP

SERVES 4

2 c. cooked or canned peas	$1\frac{1}{2}$ t. sugar
$1\frac{1}{2}$ c. liquid from peas and water	1 t. salt
1 slice onion	2 c. thin white sauce (page 74)

PREPARE 2 c. thin white sauce and let stand over hot water for 30 minutes.
DRAIN liquid from canned or cooked peas and add enough water to make $1\frac{1}{2}$ c.
COOK 2 c. peas, 1 slice onion, $1\frac{1}{2}$ t. sugar, 1 t. salt, and $1\frac{1}{2}$ c. liquid for five minutes and rub through a sieve.
COMBINE with white sauce; serve hot.
FLOAT three or four croutons on top of each serving of soup.

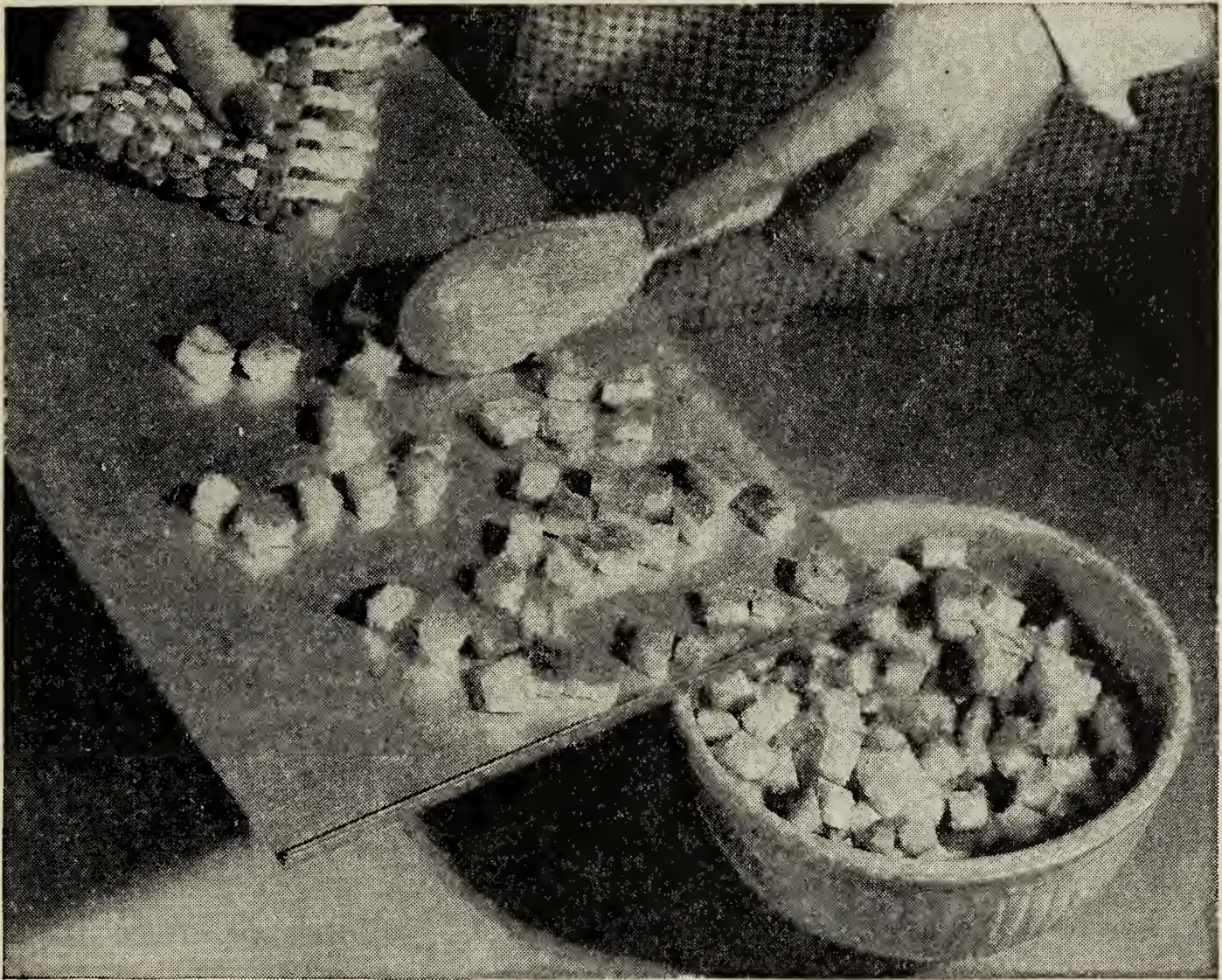
Accompaniments for soups

SOUFFLÉ CRACKERS

crackers	ice water
butter or fortified margarine	

TURN oven to 375° F.
SOAK crackers in ice water.
DRAIN crackers, place on a baking sheet, dot with butter or margarine, and bake in a moderate oven (375° F.) for 40 or 45 minutes or until crackers are puffed and brown.

CROUTONS



American Institute of Baking

CUT day old sliced bread in strips $\frac{3}{4}$ inch wide and then in cubes.
SPREAD on a baking sheet and place in a moderate oven (350° F.). Stir occasionally until delicately brown. Serve hot with soup.

BREAD STICKS

CUT day-old, sliced bread in $\frac{3}{4}$ -inch strips and place on a baking sheet in a moderate oven (350° F.) until delicately brown.

CLASS ACTIVITIES

1. Discuss luncheon menus which include foods you have learned to prepare. Suggest several combinations of a hearty vegetable and a vitamin C food, such as cream of potato soup and a citrus fruit salad. You should be able to suggest at least five different combinations.
2. Compare the cost, ease of preparation, and quality of the product in cream soups made from fresh vegetables, from canned vegetables, and from commercially canned soups.
3. Plan a luncheon party with invited guests. Serve a hearty vegetable cream soup, a vitamin C salad, a bread accompaniment, and cocoa. After the party discuss your success and pick out your mistakes.

4. Learn to make other cream soups, such as mushroom soup, purée of baked beans, and cream of tomato soup.

FUN WITH FOOD AT HOME

1. Prepare and serve three cream soups, one made from fresh or leftover vegetables, one made from canned vegetables, and one made from a commercially canned soup. Try these on your family at intervals of two or three days, and ask them which one they like best. It is interesting to use the same kind of vegetable each time if possible.

3. *Dried beans and peas make hearty dishes*

Dried beans and dried peas are rich in fuel value and make very good main dishes for luncheons, suppers, or dinners. Split pea soup and baked beans are old stand-bys in the American diet and are known as “filling” dishes. People have learned from experience that these foods “stick to the ribs” in a most satisfactory manner. The high fuel value of dried beans and peas can be proved by scientific analysis. For example, it is known that about 60 per cent of the dried navy bean is carbohydrate or “starchy” content. The navy bean also has a high protein value, which adds more calories. We shall learn more about the importance of the proteins in our later units of work.

The family of dried beans includes several members: navy, kidney, small reds, limas, pintos, and soyas. The family of dried peas also has several members: green, black-eyed, and yellow. All these varieties of beans and peas, as well as green snap beans and wax beans, belong to the legumes [leg'-ooms]. The legumes are flowering plants which form seed pods. In the case of dried beans and peas, only the seeds are eaten; but in the case of green and wax beans, the pods are eaten, usually before the seeds have fully developed. Study of the table on page 62 will show you that the green and wax beans have a low calorie count in comparison with the bean whose fully developed seeds are eaten. Another legume, not well known in this country, is the lentil.

Food with high fuel value at low cost. The human engine must have fuel to keep it going. When food prices are high and the food budget is limited, it is important to know which foods provide the highest calorie count at low cost. High calorie foods such as meat, chicken, cheese, butter, and nuts are all good foods; but when they are scarce and high priced, dried beans and peas can provide good fuel value at low cost. They can be prepared in many delicious ways.

Soups from dried peas or beans. The general process for soups from dried legumes is easy to remember: soak, simmer, and season. Study of the recipe on page 96 for split pea purée shows that this type of soup is really a variation of cream soups. After the peas have soaked for several hours and cooked, they are pressed through a sieve or strainer, thus making a purée in the same way that fresh or canned vegetables are prepared for cream soups.

Purée of bean soup can be made from baked beans or from beans which have been cooked until soft. Both bean and pea purées are hearty dishes and make a good main dish for supper or luncheon.

Baked beans with variations. There are several kinds of dried beans—navy, lima, and soya—which can be baked; and there are several ways of preparing baked beans. Boston baked beans are probably the best known of these variations, but baked beans prepared in Southern and Western ways are also popular and good to eat.

Baked beans make an excellent main dish for luncheon, supper, or meatless dinners, and they are a traditionally popular picnic food. Since the cooking time is long, many people prefer to buy their beans already baked from the delicatessen or commercially canned. It is interesting to compare the cost of home baked beans and canned baked beans. First, read the quantity of baked beans as given on the label of a can and note the cost of the can. Then compute the cost of the same amount of home baked beans. Dried baked beans swell to about two or three times their original size when they are soaked and cooked. Compute the cost of the beans, flavoring, and heat used for cooking. When you have decided how much is saved by baking the beans at home, instead of buying them in a can, compare the home cooked and canned beans for flavor and general palatability. Many brands of canned baked beans are very good, but do not always suit the family taste. In this case, it is a simple matter to add the desired flavor and rebake them for a short time in your own oven.

Chili con carne and other ways of using baked beans. A popular way of using baked beans is in chili con carne. Lean ground meat, onion, tomatoes, and chili powder are added to baked red kidney beans to make a highly flavored dish.

Other ways of using baked beans include their use in salads, sandwiches, croquettes, and bean chowder. Suggestions for some of these bean dishes are given on pages 95 to 98. Try using beans in some of these ways which are new to you. You can be especially interested in trying recipes which are popular in different parts of the country.

CLASS PROJECT: PREPARE BAKED BEANS AND SERVE THEM AS THE MAIN DISH IN A SUPPER.

Remember that baked beans are starchy, plan other foods that will make a well-balanced meal. Avoid combining such foods as baked beans and potatoes.

1. Plan your supper menu in terms of food values and for a good combination of flavors. Foods which are salty, sour, fresh and crisp, or sharp in flavor combine well with baked beans.

2. Plan your time to advantage. Since baked beans require a long period for cooking, arrange for extra time in the food laboratory. Plan to have your beans ready to eat during the class period when you will serve your supper.

3. Lay the cover correctly. Consult the diagrams for table setting on page 391.

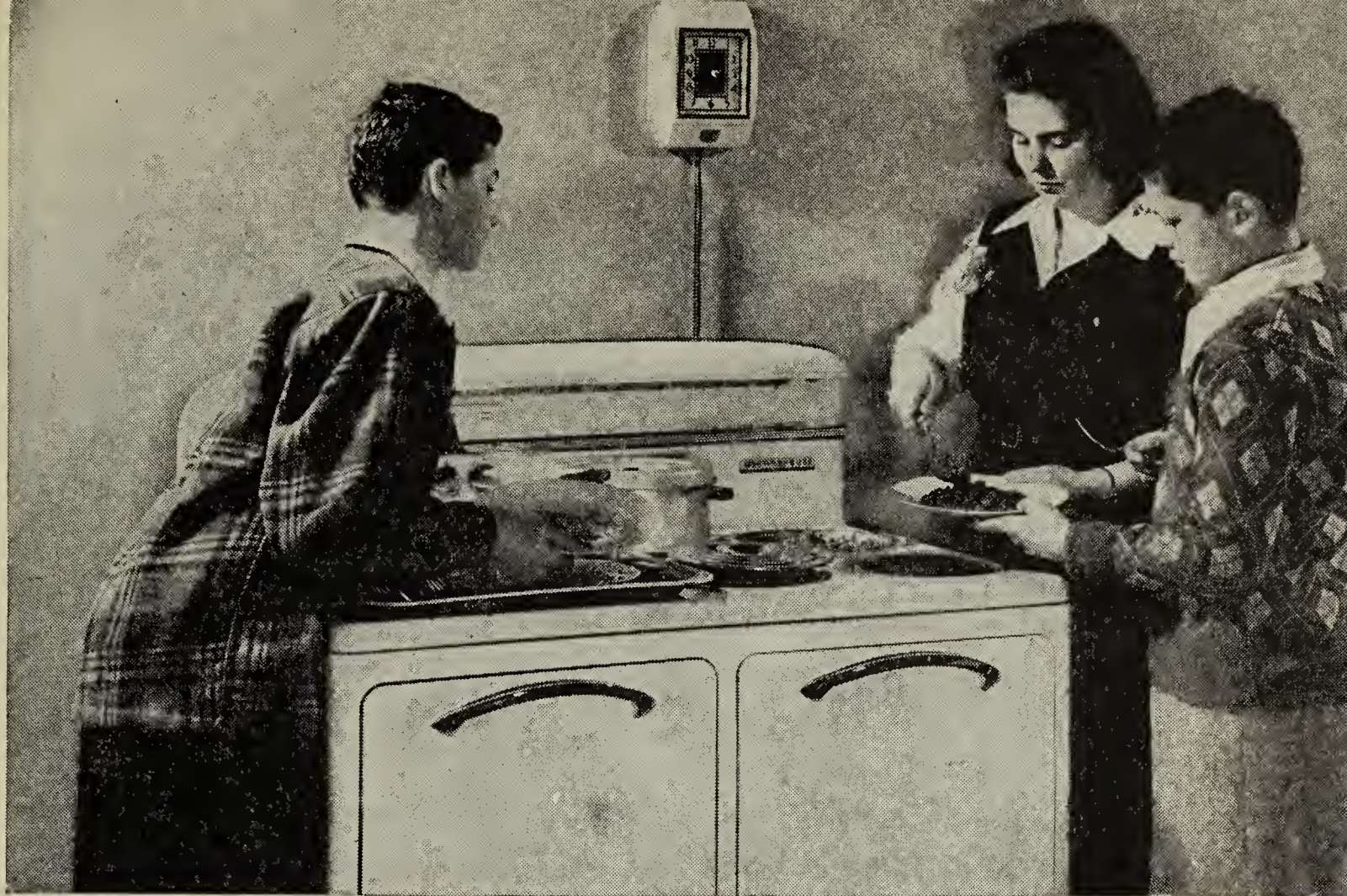
4. Judge your supper for the following points: (a) the combination of flavors, colors, and texture; (b) the combination of light and hearty foods; (c) the flavor and appearance of the beans (are they too thin? too thick? mushy?).

Soybeans are good to eat. Soy (or soya) beans have been used as food by the Chinese for many centuries, but they are newcomers to the American table. They are used extensively in industrial products such as paint, rubber substitutes, ink, and glue; but they are most interesting to the average person as a new food. They are prepared for the table in various forms: as sprouts for use in stews or raw vegetable salads, as green beans for a vegetable dish, as dried beans for baking, and as flour for making cookies and muffins.

The food value in dried soybeans differs from other dried beans because soybeans have less starch and more protein. They are preferred by overweight people who wish to avoid starchy foods. Besides their high protein content, which makes them a good meat substitute, they are high in minerals for blood, teeth, and bones and high in the B vitamins which give us good nerves, good appetites, and general good health.

TIME REQUIRED FOR COOKING DRIED LEGUMES

VEGETABLE	TIME OF SOAKING	TIME OF COOKING
	<i>hours</i>	<i>hours</i>
Beans, lima	4	1 1/4
Beans, navy	4-6	1 1/2
Beans, pinto	4	1 1/4
Lentils	4	1 1/4
Peas, black-eyed	4	1 1/2
Soybeans	12	2-3



Westinghouse Electric Corporation

A Saturday-night supper can be easily prepared in a deep-well cooker.

Recipes for dried beans and peas

SOYBEAN CHILI CON CARNE

SERVES 4

- | | |
|------------------------|--|
| 1 c. uncooked soybeans | $\frac{1}{4}$ c. chopped onion |
| 3 c. water | $\frac{1}{4}$ c. diced salt pork |
| 1 t. salt | $\frac{1}{2}$ lb. lean beef, cut in $\frac{1}{2}$ inch |
| 1 T. chili powder | cubes |
| 3 c. tomatoes | |

WASH 1 c. uncooked beans thoroughly and soak for at least 12 hours in 3 c. water.

ADD 1 t. salt and cook slowly until tender.

FRY $\frac{1}{4}$ c. diced salt pork until crisp in a heavy skillet and remove pork. In the same pan, brown $\frac{1}{4}$ c. chopped onion and add $\frac{1}{2}$ lb. beef. Stir and cook slowly for 5 minutes and remove from skillet.

PLACE beans, salt pork, beef, onions, 1 T. chili powder, and 3 c. tomatoes in a double boiler and heat to boiling; lower the heat and simmer for 15 minutes. Serve at once.

SALTED SOYBEANS

- | | |
|-------------------|------------|
| 1 c. dry soybeans | 3 c. water |
| fat for frying | |

WASH 1 c. dry soybeans thoroughly and soak for 12 hours in 3 c. water.

DRAIN and spread on a baking sheet to dry at room temperature.

HEAT fat in a saucepan to 350° F. (hot enough to brown a 1-inch cube of bread in 60 seconds). Fry $\frac{1}{4}$ c. soybeans at a time until delicately brown; drain on clean absorbent paper to absorb excess fat. Sprinkle with salt and cool.

SPLIT PEA SOUP

SERVES 4-6

1 c. dried split peas	2 T. butter or fortified margarine
8 c. cold water	2 T. flour
1 medium-sized onion	$1\frac{1}{4}$ t. salt
$2\frac{1}{2}$ -inch cube fat salt pork	

WASH and pick over 1 c. peas and soak for several hours; drain; add 8 c. cold water, 1 onion, $2\frac{1}{2}$ -inch cube salt pork and cook until tender (about 3 hours).

REMOVE onion and pork; rub peas through a coarse sieve and dice pork; return peas and pork to kettle.

MIX 2 T. flour, $1\frac{1}{4}$ t. salt, $\frac{1}{8}$ t. pepper with $\frac{1}{2}$ c. milk; add, along with remaining $1\frac{1}{2}$ c. milk and 2 T. butter or margarine, to peas. Simmer for 10 minutes and serve hot.

BOSTON BAKED BEANS

SERVES 6

2 c. dried navy beans	1 small onion, whole
$\frac{1}{2}$ t. mustard	$\frac{1}{8}$ t. pepper
$\frac{1}{2}$ c. molasses	$1\frac{1}{2}$ t. salt
3 T. brown sugar	8 strips of bacon or salt pork cut in
$\frac{1}{2}$ c. catsup	1-inch pieces
7 c. water	

WASH 2 c. dried navy beans thoroughly and soak overnight in 7 c. water.

ADD $1\frac{1}{2}$ t. salt and cook slowly in same water until tender, adding more water if necessary.

PLACE beans in crock; add $\frac{1}{2}$ t. mustard, 3 T. brown sugar, $\frac{1}{8}$ t. pepper, $\frac{1}{3}$ c. molasses, $\frac{1}{2}$ c. catsup, and bacon or salt pork cut in 1-inch pieces; stir gently; place onion on top.

BAKE covered in very slow oven (200° F.) for 8 hours.

NOTE: Soybeans may be cooked in a pressure cooker at 15 pounds pressure for 15 to 30 minutes and baked as Boston Baked Beans.

COLD WEATHER SPECIAL

Boston Baked Soybeans

Hot Corn Muffins

Cole Slaw

Apple Delight

SOUP SUPPER



Swift and Company

SERVES 4-6

2 c. dried navy beans	1½ t. salt
8 c. water	⅛ t. pepper
3 T. butter or fortified margarine	¼ t. mustard
1 c. sliced onions	2 T. flour
4 frankfurters	½ T. bacon drippings
1 c. diced celery	

SORT and wash 2 c. beans, and soak for 4 to 6 hours.

HEAT 3 T. butter or margarine in a skillet; add 1 c. onions and 1 c. celery, and brown slightly; add beans and 8 c. water; simmer for 3½ hours or until beans are soft. Add more water if necessary.

SIMMER 4 frankfurters 20 minutes; slice, and brown slightly in ½ T. bacon drippings in skillet.

MIX 2 T. flour, ¼ t. mustard, 1½ t. salt, and ⅛ t. pepper with ¼ c. cold water; add to soup and heat to boiling, stirring constantly.

SERVE in soup dishes and garnish with browned frankfurters.

NOTE: Tossed green salad and hot rolls are very good with this soup supper.

CHILI CON CARNE

SERVES 4

1 lb. ground round, chuck, or neck beef	1 t. salt
$\frac{1}{4}$ c. chopped suet	1 T. chili powder
1 medium onion, chopped	1 No. 2 can red kidney beans ($2\frac{1}{2}$ c.)
$\frac{1}{2}$ green pepper, chopped	3 c. tomatoes

PLACE	$\frac{1}{4}$ c. chopped suet in heavy skillet and heat slowly until well melted.
ADD	$\frac{1}{4}$ c. chopped onion and $\frac{1}{2}$ chopped green pepper to fat and sauté slowly for 10 minutes.
REMOVE	vegetables from skillet and sauté 1 lb. ground beef for 15 minutes, stirring frequently.
ADD	3 c. tomatoes, cooked onion and pepper, 1 T. chili powder, and 1 t. salt to meat; bring to a boil, cover and simmer for 1 hour.
ADD	beans and simmer for 20 minutes, adding water or tomato juice if chili con carne seems dry.

THE BOY OF THE FAMILY PREPARES A SATURDAY-NIGHT SUPPER

Chili Con Carne

Tossed Salad

Hot Ginger Bread and Apple Sauce

CLASS ACTIVITIES

1. How many types of dried legumes are familiar to you? Arrange an exhibition with as many types of dried beans and peas as possible. Be sure to include soybeans.
2. What is your favorite dish made from dried peas or beans? Compare preferences in class.
3. Can you report any home experiences in drying beans, peas, or other vegetables for winter use? How was the drying done? What success was achieved?
4. Plan a supper for guests following a football game with baked beans as the main dish. Plan other foods which will require a minimum of time for preparation. Plan also to let the beans bake while you are at the game; in fact, plan the complete work schedule for this supper.

FUN WITH FOOD AT HOME

1. Prepare a dried bean or pea dish with which your family is not familiar. Report on the success of the dish with your family.
2. Add recipes for dried legumes to your collection.

4. How is energy supplied by fruits and vegetables?

Like any other machine, the human body will cease to function unless it has the necessary fuel to make it go. Everyone knows that we must have food in order to keep alive, and that we must have an adequate amount to keep active and to maintain our strength for work and play. But not everyone knows how much food he needs in order to be strong and healthy, or which foods are rich in fuel value. Each of us should learn approximately how much food we need to keep our bodies in topnotch condition. This does not mean that we should measure our daily foods in spoonfuls or ounces, but that we should acquire a practical working knowledge of the fuel foods and pattern our meals accordingly.

Carbohydrates are rich in energy. The principal food sources of energy are *proteins*, *fats*, and *carbohydrates*. Carbohydrates include the sugars, starches, and cellulose (fiber) found in fruits and vegetables. Sugars and starches are good sources of energy, and cellulose is valuable for bulk, which stimulates digestive processes. The legumes are good sources of protein, which is an essential nutrient that we will discuss more fully in a later chapter. A brief study of the tables on pages 62 and 63 reveals that the fruits and vegetables having the greatest energy value are lima, navy and soy beans, corn, lentils, peas, potatoes, dried apricots, prunes, raisins, bananas, dates, figs, and canned pineapple. Several others are good sources of energy. It is easy to remember that the dried legumes and the dried fruits are good fuel foods. Remember also that potatoes, corn, peas, and bananas are energy foods, and you will have taken the first step in planning for an adequate amount of fuel in your daily diet.

What is a calorie? Energy value in food is measured in terms of calories. "Watch your calories!" is the warning given to overweight people who are apt to eat too much fuel food. This is only a figure of speech, for it is impossible to see a calorie. The real meaning is, "Do not eat more calories than you need for energy." Food not used for bodily activities is stored as fat.

The value of a fuel is measured by the amount of heat that it can produce when it is burned. As food is used (burned) in the body, it produces energy which is in turn transformed into heat. A calorie is the measure of heat or energy produced by the food when it is burned in the body. Only a small amount of some foods is required to make



ENERGY REQUIREMENTS

REPRESENTATIVE ADOLESCENT

Height: 5'3"—Weight: 108 lbs.—Age: 14



PLAYING VIOLIN
91 calories per hour



DRIVING CAR
103 calories per hour



BICYCLING
103 calories per hour



RUNNING
411 calories per hour



ENERGY REQUIREMENTS

REPRESENTATIVE WOMAN

Height: 5'4"—Weight: 124 lbs.—Age: 35

SEWING

82 calories per hour



WASHING DISHES

107 calories per hour



WASHING CLOTHES

136 calories per hour



DANCING (WALTZ)

271 calories per hour



FOOD ENERGY (CALORIES): SUGGESTED DAILY ALLOWANCES

SEX, AGE, AND ACTIVITY	AVERAGE HEIGHT INCHES	AVERAGE WEIGHT POUNDS	SUGGESTED CALORIES PER DAY
Men, 20–59 years: ¹	68	154	
Very active work ²			4500
Moderately active work ³			3000
Light work ⁴			2700
Sedentary work ⁵			2400
Women, 20–59 years: ¹	64	132	
Very active work ²			3000
Moderately active work ³			2500
Light work ⁴			2300
Sedentary work ⁵			2100
Boys, 16–19 years.....	68	139	3600
13–15 years.....	63	111	3000
11–12 years.....	57	82	2500
9–10 years.....	53	68	2400
7–8 years.....	49	55	2100
4–6 years.....	42	40	1500
Girls, 14–19 years.....	64	121	2500
11–13 years.....	58	89	2400
8–10 years.....	52	64	2100
4–7 years.....	42	39	1500
Children:			
2–3 years.....	35	29	1200
Under 2 years.....	30	22	900

From *Food and Life. Yearbook of Agriculture*, 1939. United States Department of Agriculture.

¹ A reduction of about 10 per cent was made in calorie allowances for persons between the ages of 60 and 75, and of about 20 per cent for those over 75 years. Some adjustments were also made for persons in each group whose height was above or below average.

² Very active = rapid, heavy lifting or pulling, with exposure to weather.

³ Moderately active work = standing, or walking with moderately heavy loads.

⁴ Light work = seated, with considerable arm or leg movement; or standing and walking with little lifting or strain.

⁵ Sedentary work = seated, involving little arm or leg movement.

a 100-calorie portion. These are the high-energy foods. Much larger amounts of other foods are required to make 100-calorie portions.

Unfortunately, we can not determine the calorie value of a food by looking at it or by tasting it. Fuel value, like vitamins, is hidden. However, scientists are able to discover the calorie count in any food, and their findings are useful to us in estimating the number of calories in our own diets.

Are you calorie-conscious? It is not practical or advisable to learn the calorie content of all the foods in your diet, but you should learn enough about fuel values to plan your own diet intelligently. Many people who are trying to reduce believe that if they abstain from potatoes they have eliminated the chief fattening food in their diet. The same person who refuses to eat one small potato because of its calorie

content might eat a dish of prunes without hesitation. If you will compare the calorie count on potatoes and dried prunes as given in the tables on pages 544 to 546, you will see that the prunes contain more calories than an equal amount of potatoes. On the other hand, the person who is trying to gain weight might think that she must eat only starchy vegetables in order to gain weight, not realizing that she could advantageously include dried fruits in her diet.

The girl whose weight is normal should also check up on her calories occasionally. Fatigue and restlessness may be caused by a diet which lacks the adequate number of calories. All foods have some fuel value, so it is possible to eat enough to satisfy one's hunger without including an adequate amount of energy food.

Your own calorie requirements. From the table opposite you can find the amount of calories recommended for your daily diet. Using the table beginning on page 542, estimate the calories which you had in your food within the last twenty-four hours. Remember that all foods give you some calories, so you must include the low-calorie foods as well as the high-calorie foods in your estimate. What are your findings? Do you eat enough fuel food every day? Or too much? Remember that the carbohydrates in fruits and vegetables constitute only one of the important sources of energy. Protein foods and fats, which we will study in later units of work, are excellent fuels. However, carbohydrates are the cheapest source of energy and generally supply about one half of the fuel requirements in the average diet.

Recipes for fruit dishes

BAKED APPLES

SERVES 4

4 baking apples	$\frac{1}{4}$ t. cinnamon
$\frac{1}{4}$ t. grated lemon rind	$\frac{1}{4}$ c. water
6 T. granulated, brown, or maple sugar	1 t. butter or fortified margarine

WASH and core apples and place in a baking dish.

TURN oven to 350° F.

MIX 6 T. sugar, $\frac{1}{4}$ t. cinnamon, and $\frac{1}{4}$ t. lemon rind together; fill cavities of apples with sugar mixture.

DOT with 1 t. butter or fortified margarine. Pour $\frac{1}{4}$ c. water in baking dish.

BAKE in a moderate oven (350° F.) for 30 minutes or until soft. Serve cold or hot.

NOTE: Raisins and nuts may be added to sugar for variations.

DANISH APPLE DESSERT



American Institute of Baking

SERVES 4

2 c. apple sauce	$\frac{1}{4}$ t. cinnamon
1 c. toasted bread crumbs	$\frac{1}{8}$ t. nutmeg
1 egg yolk, well beaten	2 T. sugar
$2\frac{1}{2}$ T. melted butter or fortified margarine	$\frac{1}{8}$ t. grated lemon rind

Topping

1 egg white, stiffly beaten	$\frac{1}{2}$ t. vanilla
2 T. sugar	

TURN oven to 325° F.

PREPARE 1 c. bread crumbs and toast until a golden brown.

MIX gently 2 c. applesauce, beaten egg yolk, $2\frac{1}{2}$ T. melted butter or margarine, $\frac{1}{4}$ t. cinnamon, $\frac{1}{8}$ t. nutmeg, 2 T. sugar, and 1 c. toasted crumbs. Place in a greased casserole.

- BAKE** in a slow oven (325° F.) for 45 minutes.
- JUST BEFORE** the pudding has finished baking, beat egg white until it peaks; then add 2 T. sugar and ½ t. vanilla. Remove pudding from oven; top lightly with meringue. Return to oven for 15 minutes or until topping is brown.
- NOTE:** This is a good way to make a different dessert and to use left-over bread that often goes begging.

APPLE SAUCE

SERVES 4-6

- | | |
|---------------|---------------------|
| 6 tart apples | ½ c. sugar |
| ½ c. water | 3 pieces lemon rind |

WASH 6 apples; quarter and core.

ADD ½ c. water and lemon rind; cook 15 to 20 minutes, or until apples are tender. Run through a coarse sieve. Add ½ c. sugar, cook for two minutes, and store in a covered glass jar in the refrigerator.

APPLE CRISP

SERVES 6

- | | |
|------------------------------|------------------------------------|
| 6 medium tart apples, sliced | ⅔ c. flour |
| ¼ c. water | ½ t. cinnamon |
| 2 T. lemon juice | ¼ t. nutmeg |
| ¼ t. lemon rind | ¼ t. salt |
| 1 c. sugar | 5 T. butter or fortified margarine |

WASH 6 apples; pare very thin, core, and slice; place in a shallow baking dish.

TURN oven to 350° F.

MIX ¼ c. water and 2 T. lemon juice together and pour over apples.

COMBINE ½ t. cinnamon, ¼ t. nutmeg, and ½ c. sugar and sprinkle over apples.

BLEND remaining ½ c. sugar with ⅔ c. flour, ¼ t. salt, ¼ t. lemon rind and 5 T. butter or fortified margarine until crumbly. Sprinkle over apples and pat gently with spoon so that it will adhere to apples.

BAKE in a moderate oven (350° F.) for 50 minutes, or until apples are tender and the crust is crisp and lightly brown.

SERVE warm, plain or with cream or lemon sauce (page 256).

BAKED FRUIT WHIP

SERVES 6

- | | |
|-------------------------------------|------------------------------|
| 1½ c. stewed pitted prunes or apri- | ½ c. sugar |
| cots, cut in quarters | 4 egg whites, stiffly beaten |

TURN oven to 325° F. Butter baking dish slightly.
 CUT 1½ c. fruit in small pieces, and add ½ c. sugar.
 BEAT egg whites until stiff, and fold in fruit. Pile lightly in baking dish, and bake in a slow oven (325° F.) for 30 minutes.
 SERVE with soft custard sauce (pages 188 to 189).

UNCOOKED FRUIT WHIP

SERVES 4

¾ c. prune or apricot purée ¼ t. grated lemon or orange rind
 1 egg white, stiffly beaten ¾ c. cream, whipped

PREPARE ¾ c. fruit purée by pressing fruit through a coarse sieve.
 BEAT egg white until stiff, and fold in fruit purée and ¼ t. lemon or orange rind.
 BEAT cream until stiff, and fold into mixture; lightly pile into sherbet glasses, and garnish with cherry.

APPLE ROLL

SERVES 4-5

1 recipe biscuit dough (page 128), ½ c. sugar or corn sirup
 or prepared biscuit mix ⅛ t. nutmeg
 1 c. chopped tart apples ½ T. butter or fortified margarine
 ⅓ c. raisins ½ c. water
 ½ t. cinnamon

MIX 1 c. apples and ⅓ c. raisins.
 TURN oven to 375° F.
 PREPARE biscuit dough. Roll to ¼-inch thickness and spread with apples. Roll as for jelly roll and cut in slices 1 inch thick.
 PLACE cut side down in a greased pan.
 ADD ½ T. butter or margarine, ⅛ t. nutmeg, ½ t. cinnamon, ½ c. sugar or corn sirup to ½ c. boiling water and pour over rolls.
 BAKE in a moderate oven (375° F.) for 40 to 50 minutes.
 SERVE with top milk or cream.

CLASS ACTIVITIES

1. Working in groups or committees, prepare menus for family meals for three days. Exchange menus. Consider these menus for the following points: (a) energy foods (b) vitamin C foods (c) good combination of flavors (d) good color combinations (e) good contrasts of texture (f) easy methods of preparation.

2. Set up an exhibit of 100-calorie portions of fruits and vegetables. Your exhibit should include about ten foods, some with high energy value and some with low energy value.

3. What valuable essential do high-energy fruits and vegetables furnish besides fuel?

4. Plan a fruit salad which will include a vitamin C food and a high-calorie food. Plan a vegetable salad which will include both vitamin C and high-calorie content.

5. During what period of the life span is the energy food requirement highest? Why?

6. Name five foods which are high in calories and low in cost.

7. Discuss the results of a diet lacking in energy food; a diet with too much energy food.

A SUMMARY OF YOUR STUDY OF THE HEARTY VEGETABLES AND FRUITS

Your study of fruits and vegetables in this section should have given you certain definite knowledge and skill. Check up on your progress in learning according to the topics listed below. Can you discuss each topic and prepare each of the foods listed?

Nutrition

Calories
Energy-rich vegetables
Energy-rich fruits
Carbohydrates
Your personal energy
requirements

Points on buying

Potatoes
Government grades on
potatoes
Legumes and dried fruits

Skills in food preparation

Baking, boiling, mashing,
scalloping, and creaming
potatoes
Vegetable plate for supper
White sauce
Cream soups
Dishes from dried legumes
Serving a soup luncheon

WHAT DO YOU KNOW ABOUT STARCHY VEGETABLES?

The following test exercises will help you to check your knowledge of the high-energy vegetables, including their nutritive value, preparation, selection, and place in meal planning.

What is wrong in this recipe?

Your study of recipes and experience in preparing vegetable dishes should help you detect the error in each of the following recipes. One item is wrong in each case. On a separate sheet of paper write the number of each problem,

and opposite the number write the error found in each case. **Do not write in this book.**

1. Ingredients for scalloped potatoes

4 or 5 medium potatoes	2 T. butter or margarine
$\frac{1}{2}$ c. flour	1 t. salt
$1\frac{1}{2}$ c. milk	

2. Ingredients for cream of corn soup

2 T. canned corn	$\frac{3}{4}$ c. milk
2 c. thin white sauce	$\frac{3}{4}$ t. salt
1 slice onion	$\frac{1}{8}$ t. pepper

3. Steps in baking beans

- (1) Soak beans 15 minutes in hot water.
- (2) Add salt to beans and cook slowly till tender.
- (3) Place cooked beans in bean pot, add seasonings, and mix gently.
- (4) Bake in slow oven for 8 hours.

4. Steps in making potato cakes

- (1) Shape potatoes into uniform cakes about $\frac{1}{2}$ inch thick.
- (2) Place fat in heavy skillet and heat.
- (3) Place cakes in skillet and brown rapidly in a very hot fat.

A true and false test about high-energy vegetables

Some of the following statements are true and some are false. On a separate sheet of paper write the number of each statement and the word "true" or "false" after it. **Do not write in this book.**

1. The only nutritive value in potatoes is energy.
2. Dried legumes are an excellent high-energy food at low cost.
3. Green beans and lima beans are good energy foods.
4. Cream soup is an excellent way of serving a starchy vegetable.
5. A diet is lacking in carbohydrate unless it includes potatoes.
6. A calorie is a measure of energy in the human body.
7. The minimum daily requirement for calories is the same for all people.
8. The soya bean is a good energy food.
9. Fuel value may be as high in leftover food as in freshly prepared food.
10. A good dinner always includes three starchy vegetables.

Can you select the best answer?

In the following quiz, one of the terms listed below the question is related to the thought expressed in the question. On a separate sheet of paper write the number of each question, and opposite the number write the correct answer. **Do not write in this book.**

1. How many calories should an active girl between 16 and 20 have in her daily diet?

1000 5000 100 2400 1942

2. A scientist who is trying to ascertain the calorie count in a vegetable will be interested in which of the following?

carbohydrate vitamins color flavor

3. If you were selecting an energy food as the main dish for your lunch at the school cafeteria, which would you select?

scalloped tomatoes baked beans buttered asparagus

A matching test for related ideas

Each term in the first column is related in thought to a term in the second column. On a separate sheet of paper write the pairs of terms which belong together. **Do not write in this book.**

- | | |
|--------------------------|---------------------|
| Succotash | Potato cakes |
| Cellulose | Measure of energy |
| Split pea soup | Thin white sauce |
| Dried legume | Baked beans |
| Cream soup | Soak and simmer |
| Calorie | Fiber |
| Leftover mashed potatoes | Corn and lima beans |
| Very active man | 4500 calories |

REFERENCES FOR FURTHER READING

American National Red Cross, *Food and Nutrition*. ARC 725, Washington, D. C., revised, January 1942. Obtain through local Red Cross chapter.

Amidon, E. P., Bradbury, D. E., and Drenckhahn, V. V., *Good Food and Nutrition*. John Wiley and Sons, Inc., 1946. Pp. 8-11, 173-178.

Davis, Adelle, *Vitality Through Planned Nutrition*. The Macmillan Company, 1942. Pp. 187-198.

Harris, F. L., and Henderson, R. A., *Foods*. D. C. Heath and Company, 1938. Pp. 9-29.

Harris, J. W., and Speer, E. L., *Everyday Foods*. Houghton Mifflin Company, 1946 and 1941. Pp. 187-198.

Hughes, Osee, *Introductory Foods*. The Macmillan Company, 1940. Pp. 50-69.

Silver, Fern, *Foods and Nutrition*. D. Appleton-Century Company, Inc., 1941. Pp. 2-11, 277-288.

3

Cereals Three Times a Day

The cereal family is a large one, and tremendously important in our diet. It includes the seeds from grasses such as wheat, oats, and rye, and other grains such as corn and buckwheat. These products are processed in many forms and appear upon our tables as breads, breakfast foods, macaroni, rice dishes, and pastry. The chart for the Basic 7 Food Groups designates this family of foods as Group Six. Nutrition experts recommend that we eat some kind of *bread at every meal and another cereal food once or sometimes twice a day*.

Our study of the cereal foods includes a discussion of their nutritive values, learning to prepare them in appetizing and attractive ways, a consideration of their cost, and methods of storing them properly. Bread is the most important cereal food. It is a standard article of diet and appears in some form—biscuits, muffins, rolls, toast, or plain sliced bread—at every meal. For many centuries bread has been known as the staff of life, perhaps because it is a high-energy, low-cost food which is easily produced and very palatable.

In addition to high-energy value, the cereal foods contain B vitamins and iron, unless these nutrients are removed by manufacturing processes. Everyone should learn how to obtain these hidden values in bread and other cereal foods; these nutrients are often destroyed before the cereals reach our tables. Uninformed people sometimes disregard these hidden values as unimportant, but a little study of simple nutrition will show you how essential they are to your health and happiness. During World War II a government order was issued requiring bakers to enrich white-bread products with iron and vitamins. Health authorities urge a continuation of this practice in peacetime.

1. Breakfast cereals: to cook or not to cook?

The wide variety of breakfast cereals, both cooked and ready-to-eat, provides an excellent opportunity for satisfying one's personal preferences. However, there are other considerations besides palatability which should guide your choice. Calorie count, mineral and vitamin values, cost per ounce, time required for preparation, as well as taste appeal should help you to select your morning cereal.

What is your cereal made of? Breakfast cereals are made chiefly from wheat, corn, oats, and rice; but not all food from the same grain is alike in form or in content.

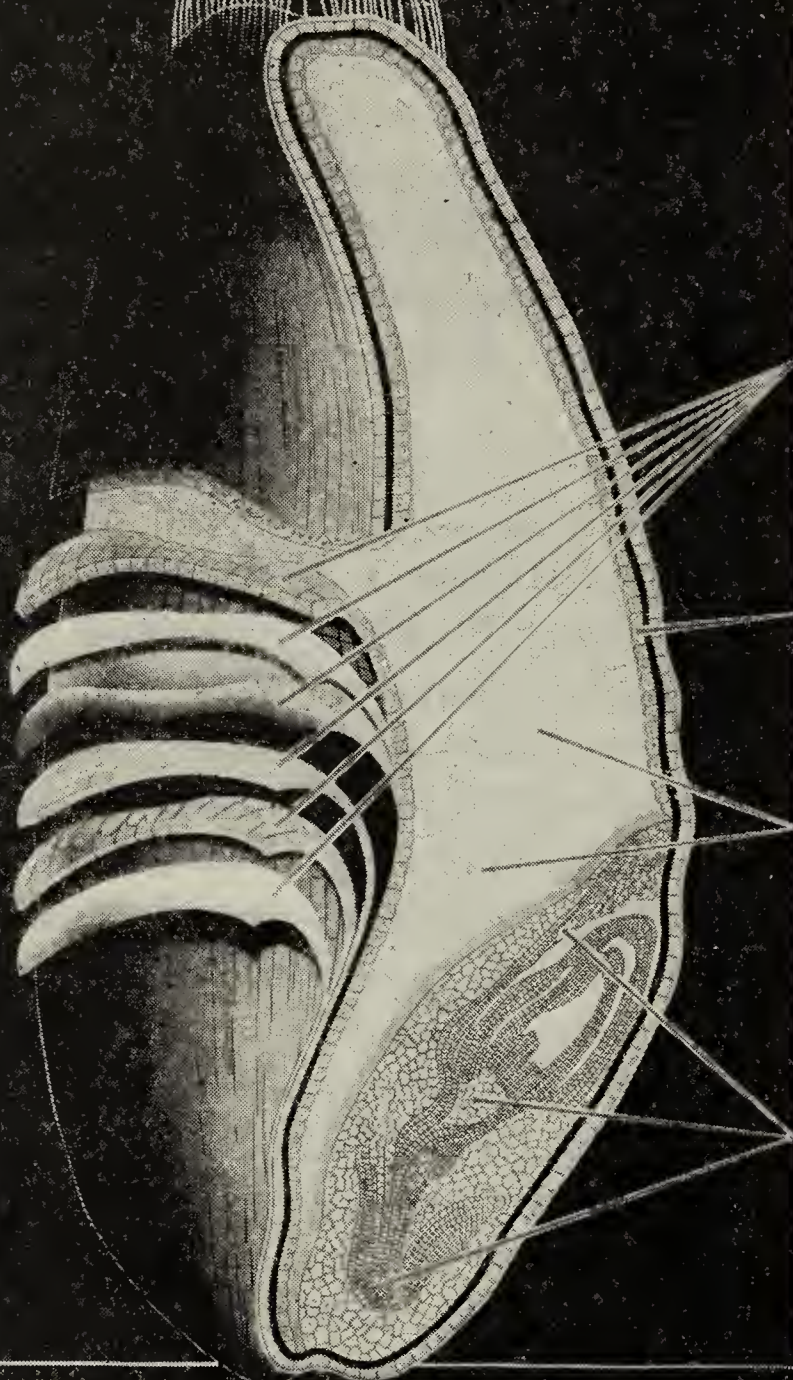
A brief study of the structure of a wheat kernel will aid us in understanding the different food values in breakfast cereals. Each kernel, as shown in the diagram on page 112, is composed of three parts. The bran or outer covering consists of several layers, represented as being peeled off the kernel. These bran layers are chiefly cellulose, containing iron, phosphorus, vitamin B complex, and some protein. The endosperm, or white center, which constitutes the large portion of the kernel under the bran layers, is composed mainly of carbohydrate and protein, making it an excellent source of energy. The third part of the wheat kernel is the germ or embryo. It is very rich in vitamin B₁, or thiamin, and has a large fat content.

Breakfast cereals made from different parts of the wheat kernel obviously have very different food values. A breakfast food made only of the starchy endosperm will have a very high energy value, but will be lacking in vitamin and mineral content. On the other hand, a cereal made entirely of bran will be rich in mineral and vitamin B content, but will be short in energy value.

Iron is an essential food element which the body must have. It is needed for the formation of new red blood cells, which are important because they transport oxygen to all the tissues of the body. Lack of adequate amounts of iron in the diet results in loss of "pep" and may cause an anemic condition.

The B vitamins are protective agents which help to keep the body strong and healthy. Thiamin is necessary for normal growth and good muscles, and prevents a serious disease called beriberi. Riboflavin is also necessary for normal growth, and contributes to good nerve and muscle tone. Niacin helps to keep the skin healthy and prevents a fear-some disease called pellagra.

Whole Wheat



Bran

The brown outer layers. Contains indigestible (bulk-forming) carbohydrate, vitamins of B-complex, iron, calcium, protein, phosphorus, and copper.

Aleurone Layer

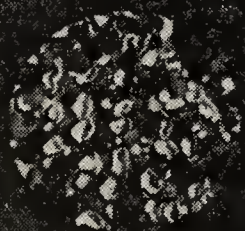
Rich in protein and phosphorus.

Endosperm

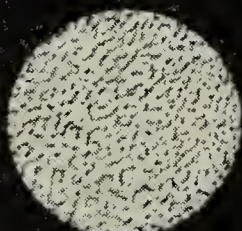
The white center. Composed mainly of carbohydrate and protein.

Germ

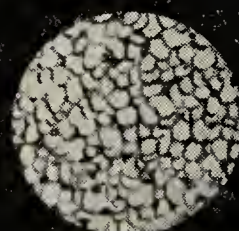
The heart of wheat (embryo). Rich in protein of high biological value. One of the richest natural sources of thiamin (vitamin B₁). Contains also other vitamins of the B complex, vitamin E, phosphorus, iron, copper, carbohydrate, and fat.



**Bran and
Aleurone Layer**



+ Endosperm



+ Germ



**= Whole Grain
Cereal**

Ralston Purina Company

This cross section of a grain of wheat shows the various nutrients which whole wheat contributes to the diet.

For practical purposes it is not necessary for us to study each of the B vitamins separately. They occur together in the same foods, and we cannot have a deficiency in one without a deficiency in the others, even though the symptoms merely indicate the lack of one. The B vitamins are interrelated functionally; that is, one cannot function in the body except in the presence of the others. Therefore, our chief concern is with the whole B complex. Eating several foods rich in B vitamins every day is a safe rule. Remember that whole-grain cereals are especially good sources for the B complex and should be included in the daily diet.

Whole-grain cereals which contain bran, endosperm, and germ provide the most complete food value. Cracked wheat or whole-wheat, rolled oats or oatmeal, one type of corn meal, and brown rice are made from the entire kernel of grain. These foods have considerably more food value than those which are made only of endosperm.

Both raw and ready-to-eat cereals vary in food value, depending upon the part of the grain from which they are made. Many of them are enriched by adding extra amounts of thiamin, riboflavin, niacin and iron. Some of them are also enriched by adding vitamin D, the sunshine vitamin.

Read the label on your package of breakfast cereal. Breakfast-food packages are gay and attractive. Many of them are decorated with cartoons, animal pictures, or realistic views of the cereal served with beautiful red strawberries. Naturally, we like these decorations, but good shoppers know that more important information is stated on each container. The Federal Food, Drug, and Cosmetic Act requires that every packaged food be labeled with its contents. You will find that every box of cereal bears a printed statement telling from what it is made; for example, the label may state that corn flakes are made from corn, sugar, malt, and salt and are enriched with niacin, thiamin, and riboflavin.

Such information is of great importance to us because otherwise we do not know what we are getting for our money. Twenty-five cents spent for a package containing eight ounces of cereal made only of endosperm is not as good a value as twenty-five cents spent for 8 ounces of cereal made from whole wheat or whole oats.

Compare costs of breakfast cereals. Price should be one consideration in the selection of a breakfast food. Delicious cereals are available at minimum cost. High prices do not necessarily mean that the cereal tastes better or contains more food value than less expensive kinds.

CLASS PROJECT: A LIGHT BREAKFAST WITH A READY-TO-EAT CEREAL, FRUIT, TOASTED ROLL, AND COCOA.

Plan a menu which will include a whole-grain or enriched cereal; fresh or dried prunes, apricots, or peaches; a toasted roll or muffin which is a leftover; and cocoa.

1. Make a work schedule. Study the recipe for cooking dried fruits on page 119, and plan to have the fruit ready at the time when your breakfast will be served. Prepare the fruit ahead of time and store in the refrigerator.

2. Be sure the cereal is very crisp. If necessary, crisp it in the oven before serving.

3. Use a muffin or roll which is slightly stale. Cut in half and toast in the oven just before serving. See page 57.

4. Serve milk, 10 per cent milk, or light cream with the cereal.

5. Plan the service of dishes and silver which is needed for this breakfast. Do not forget the cream and sugar for the cereal and the butter or fortified margarine for the roll. Study the diagrams on page 390 and decide on the correct way to lay the cover. This is a problem which you should be able to work out without help from your teacher.

6. Your procedure in getting breakfast (either at home or in the school kitchen) should include clearing up as much as possible *while you are preparing the meal*. What can you do during the preparation of this breakfast which will hasten the washing-up process but will not interfere with rapid work?

7. Calculate the cost of the breakfast for your laboratory group or "family."

8. Judge the breakfast which is prepared by each group of workers in the laboratory. Does the breakfast look attractive? Appetizing? Is the cover correctly laid?

Usually, the raw cereals are cheaper per pound than the ready-to-eat foods; but if time is an important factor, you may find it advisable to buy the more expensive kind.

Compare the costs of various breakfast cereals sold in your local stores. Secure the information requested in the table below for each one which is included in your investigation. In order to have a good basis for comparison, your list should include the following: a whole-grain cereal such as cracked wheat, oatmeal, or corn meal; a precooked or "quick" cereal such as rolled oats; a refined cereal such as cream of wheat or farina; two or more ready-to-eat cereals.

What do breakfast-food advertisements mean to you? Enormous sums of money are spent annually in the United States in the attempt to persuade us to buy certain kinds of breakfast cereals. Radio programs, magazines, and circular letters tell us about the delicious flavor, the nutritious value, and the superior qualities of numerous brands.



Cereal Institute, Inc.

Cereal and fruit can make a pretty-as-a-picture breakfast.

Many radio programs include day-by-day adventure tales or love stories which are sometimes referred to as the “serial cereals.” Every advertisement infers that its particular kind of cereal is the best in every way.

We can judge flavor and appetizing qualities for ourselves, but nutritious elements cannot be detected by taste, sight, or smell. There

NAME OF CEREAL	COST PER PACKAGE	AMOUNT IN PACKAGE	COST PER OUNCE	TIME REQUIRED	MINERALS AND VITAMINS

CLASS PROJECT: A BREAKFAST WITH A COOKED CEREAL, FRESH FRUIT OR JUICE, RAISIN BREAD, AND BEVERAGE.

Plan a menu which includes a cooked cereal, a fresh fruit or juice, bread or toast, and either milk or cocoa.

1. Different groups in your class should prepare different cereals. The various menus should include corn meal mush, hominy or hominy grits, cracked wheat, oatmeal or rolled oats, and brown rice.
 2. The fruit may be bananas sliced on top of the cereal, or orange sections or other fruit which is served separately.
 3. Make a work schedule which will aid you in getting the foods ready on time. Study the recipes and timetable for cooking cereals and plan accordingly. If the cooking time is longer than your class period, make a special arrangement to get the cooking started earlier. See time table page 119.
 4. Decide the time during your class period when the breakfasts should be ready to serve. Plan your work to meet this dead line.
 5. Each group should inspect all the breakfasts and comment on mistakes and good points.
 6. What can be done during the preparation of this breakfast to hurry the dishwashing?
-

are dozens of very good-tasting breakfast foods on the market, each of them advertised in superlative terms, promising better health, greater strength and vigor, and faster growth for young people. How will you decide which one to buy? Will you choose the one with the most exciting radio program, the one with the most beautiful colored pictures on the package, the one with the best "free offers," or the one with the highest food value?

Anyone who understands food values will choose a whole-grain or enriched cereal that has taste-appeal and can be produced for the least money. There are many cereals which are good sources of energy, iron, and the vitamin B complex. By reading the label on a package of breakfast food, you can determine its nutrient value, and by figuring the cost per ounce, you can discover which is cheapest.

Nutritious content, taste appeal, and cost should be your guide in the choice of a breakfast cereal. Do not be confused by high-powered advertising which persuades you to buy the kind with pretty pictures or singing commercials on the air. Common sense will tell you that there are no secret or precious ingredients in a particular kind of cereal which is not present in other brands. They are all made from grain, and those made from whole grain are most desirable.



Cereal Institute, Inc.

Fruit juice with mint garnish, oatmeal with milk and jelly, raisin bread with butter, and milk make a wholesome breakfast.

Care and storage of breakfast cereals. For hygienic handling, there are certain rules which should be observed in storing and caring for breakfast foods, whether in the home kitchen or the school laboratory.

1. Ready-to-eat cereals should be kept dry and protected from dust and dirt. Most boxes are lined with heavy waxed paper which helps to keep the cereal crisp. When opening a package of cereal, avoid tearing the box and wax paper in such a way that it cannot be tightly closed. Cut the lid so that it opens like a trap door, and pull the paper flaps apart so that they can be firmly closed again.

2. Ready-to-eat cereals can be kept in a cupboard above a range, radiator, or other warm place to aid in maintaining their crispness. Raw cereals should not be kept in a warm place.

3. All cereals should be protected from mice and other vermin. In cases where tight cupboards are not available, transfer the cereals to tight metal or glass containers. Label each jar with the name of its contents, and the directions for cooking the cereal should be attached.

4. Watch cereals for the appearance of weevils. These insects attack grain in storage and ruin it for use as food. The grain weevils resemble very small flies and might be mistaken for fruit flies. They bore into the kernels of grain and deposit their eggs, which later hatch into larvae or worms. Raw cereal which is milled from weevil-infested grain may not show any signs of the pest until it has stood upon the shelf for some time. Weevils grow more rapidly in warm weather.

If an open package containing weevils stands on a shelf with other packages of cereals, the weevils will eventually attack the other cereals. Unless the cereals are used within a short period of time, it is best to put them into tight glass jars or metal containers. Then if weevils should appear in one cereal, there is no chance for them to spread to others.

Cooking breakfast cereals. Properly cooked cereal is (1) smooth without lumps, (2) thoroughly cooked with no raw flavor, (3) salted for good flavor, (4) fairly firm in consistency. However, the consistency of a cereal is a matter of personal preference.

Perfect results in cereal cookery depend upon the right proportions of cereal, liquid, and salt; the method of combining the ingredients; and the length of the cooking period. Instead of water, cereal may be cooked with milk, which adds greatly to the nutritive value. Cereal cooked with milk is especially good for children and older adults.

Thick cereals can be thinned to the desired consistency by the addition of liquid, whereas it is difficult to add more cereal to thicken it because it requires longer cooking. It is usually a good plan to follow the directions on the package the first time one tries a new cereal; if the result is not of the desired consistency, the recipe can be altered before it is used the next time. The general rules for cooking cereals are as follows:

Method 1: Cook the cereal in a saucepan, using the following steps:

1. Boil the required amount of water.
 2. Put salt in either the water or the cereal.
 3. Sprinkle the cereal in the boiling water, and stir constantly for at least two minutes. Reduce heat but keep at boiling temperature.
 4. Continue cooking for the required time, stirring occasionally.
- If the cereal pan is soaked in hot water, it will be easy to wash.

Method 2: Cook the cereal in a double boiler, using the following steps:

1. Boil the required amount of water in the top of a double boiler, directly over heat; boil water in the lower part also.

2. Sprinkle the cereal and the salt into the rapidly boiling water in the top of the double boiler; stir occasionally; and cook over direct heat for 5 minutes.

3. Place the top part of the double boiler inside the bottom part. Continue cooking for 30-45 minutes.

CEREAL	QUANTITY	BOILING WATER	SALT	COOKING TIME	SERVINGS
Quick oats	1½ cups	3 cups	¾ t.	5 min.	4
Cream of wheat (quick cooking)	½ cup	3 cups	¾ t.	5 min.	4
Rolled oats	1 cup	3 cups	1 t.	30 min.	4
Rice (brown)	¾ cup	8 cups	¾ t.	50 min.	4
Rice (white)	1 cup	8 cups	1 t.	25 min.	4
				to 30 min.	
Corn meal ¹	1 cup	4 cups	1¼ t.	40 min.	4
Hominy grits	1 cup	4 cups	1 t.	45 min.	4
Cracked wheat	¾ cup	3 cups	1 t.	45 min.	4
Farina	½ cup	3 cups	1 t.	5 min.	4
Maltex	1 cup	3 cups	1 t.	5 min.	4

Variations: Cereals may be cooked in milk. Fruits such as dates or raisins may be cooked in cereal. Cereal may be cooled, sliced, and sautéed. Cream of wheat or corn meal may be used instead of flour in coating croquettes, etc.
¹ Mix corn meal with one cup of cold water and then add to boiling water.

Recipe for dried fruits
STEWED DRIED APRICOTS OR PRUNES

½ lb. dried apricots or prunes ¼ c. sugar
2 c. water several pieces of lemon rind

WASH ½ lb. apricots or prunes thoroughly in warm water. Place in saucepan, cover with 2 c. water, and soak for four hours or overnight.

ADD several pieces of lemon rind and bring to a boil; simmer for 15 minutes.

STIR in ¼ c. sugar; stir and cook for one minute. Cool.

PLACE in a covered glass jar in the refrigerator until ready to serve.

NOTES: Several jars of cooked fruit in the refrigerator can provide fruit for breakfast and a good dessert for lunch or dinner.

The directions for cooking tenderized prunes and apricots are printed on the packages in which they come.

FAVORITE BREAKFAST MENUS

- Shredded Wheat and Strawberries
- Soft-cooked Egg
- Whole-wheat Bread and Butter
- Cocoa or Milk
- Stewed Apricots
- Ready-to-eat Cereal
- Buttered Cracked-wheat Toast
- Milk or Cocoa

CLASS ACTIVITIES

1. Make a survey of the breakfast cereals usually eaten by members of the class. Note how many kinds are used. How many of these are whole-grain or enriched cereals? Would you recommend any changes in the eating habits of the class members concerning cereals? Why?

2. Compare the labels on cereal packages for information about the product. Which ones give the most facts concerning nutritive values?

3. Discuss advertising as related to cereals. What do you think an advertisement should tell about a cereal? Report instances of how advertising has caused you to choose a particular breakfast food.

4. Write to breakfast-food companies for free literature giving nutrition facts about their products. Arrange an exhibit of these materials.

5. If possible, visit a mill or factory which processes breakfast cereals.

6. Hold a "candid confession" session in which each girl tells exactly what she had for breakfast that day. Criticize her breakfast for both good and bad points. Remember what you have learned about vitamin C, calories, iron, and the vitamin B complex. Use the tables at the back of the book to determine the food values in the various breakfasts.

FUN WITH FOOD AT HOME

1. Plan a breakfast party and invite guests.

2. Collect recipes and pictures of good combinations of cereals and fruits, for example, corn flakes and strawberries, cream of wheat and dates, rice and sliced peaches.

3. Prepare and serve a cooked cereal which is new to your family. Report on your success.

4. Estimate the weekly expenditure for cereals for your family. Can you suggest any change that would result in better value for the money spent?

2. Hot breads: quick and good!

Bread is a short, five-letter word with a big meaning. The dictionary defines it as an article of food which is prepared by moistening, kneading, and baking flour made from grain. By adding other ingredients, such as a leavening agent, fat, eggs, sugar, nuts, or raisins, a very great variety of breads can be obtained. An examination of the recipes in any modern cookbook will show recipes ranging from white bread to brown bread, from buns to biscuits, and from cinnamon rolls to corn pones. Breads can be divided into two general classes: those which are made with yeast as the leavening agent and those which are made with baking powder, soda, eggs, or steam as the leavening. In this problem

we are concerned with the latter group, commonly called quick breads, or hot breads.

Types of quick breads. The batters and doughs from which quick breads are made differ in thickness, depending upon the proportion of flour to liquid. When these two ingredients are about equal, the resulting mixture is a batter which is thin enough to pour. Griddle cakes, waffles, and popovers are made from pour batters. Ordinarily, we do not think of hot cakes and waffles as bread, but their ingredients put them into this classification.

When the amount of flour is approximately twice that of the liquid, the resulting mixture is a thick batter which drops from the spoon. Muffins, corn bread, and drop biscuits are made from drop batter. When about three times (or more) as much flour as liquid is used, the mixture is a soft dough. Biscuits and rolls are made from a soft dough.

Many delicious variations of the basic recipes for griddle cakes, waffles, muffins, biscuits, and quick loaf breads have been developed, and make this kind of cookery especially interesting. Apple griddle cakes, chocolate waffles, whole-wheat muffins or biscuits, and nut bread are some of the many delightful ways of preparing quick breads. A survey of the quick-bread recipes on pages 128 to 134 and in other books will reveal numerous ways of adding unusual glamour to these everyday articles of food.

Southern hot breads are famous. Hot bread of some kind is a standard article of diet in the South. "Please pass the bread," refers to biscuits, muffins, or corn bread. In the North this request refers to sliced yeast bread. A Southerner who desired the sliced bread would say, "Please pass the white bread."

The South has long been famous for its wonderful biscuits and corn meal breads. It is said that "the home of corn breads is the South." Spoon bread, baked grits, corn meal drop cakes, hoe cake, corn dodgers, and corn sticks are some of the breads eaten daily. Any visitor to the Southland comes away wishing that he, too, lived in a place where delicious hot breads were served at every meal.

Food values in quick breads. The basis for all breads is flour, a cereal-grain product. In our discussion of breakfast foods, we learned that the cereals are an excellent high-energy, low-cost food, and that whole-grain cereals are a good source of iron and the B vitamins. All that we learned about the nutrients in cereal breakfast foods applies also to breads. A biscuit or muffin made from whole-wheat flour possesses mineral and vitamin content not found in white flour unless it has been

CLASS PROJECT: BAKING POWDER BISCUITS.

Your aim in this project is to make biscuits which are as nearly perfect as possible. Serve them with margarine, butter, or jelly.

1. Study the general procedure given in this problem and the basic recipe on page 128.

2. Watch a demonstration of making biscuits following the steps as given on page 123. Time the demonstration.

3. Know what you are going to do before beginning work. Memorize the directions. Then work quickly and efficiently. Try not to use more time than that taken for the demonstration.

4. When the biscuits are done, arrange them on a plate and put the plate on a table with the biscuits baked by other groups. Judge the biscuits by the standards given below; also consult "Biscuit Troubles," page 124.

5. Exchange half your biscuits for half of those baked by another group. Compare them for lightness, flavor, texture, and other points.

SAFETY WARNING: Take care in lighting the oven.

enriched by their addition. Enriched white flour, however, does not have the regulatory effect of whole-wheat flour because it lacks the fiber content or roughage found in the bran.

Standards for judging biscuits. There is an old saying that "The proof of the pudding is in the eating." This is no less true of biscuits than of puddings. However, the quality of a biscuit can be partly judged by its appearance. After one has learned the characteristic appearance of a good biscuit, it is not difficult to predict its palatability before tasting it. Judge biscuits according to the following points, and rate them as excellent, good, or poor for each point. These standards will be useful to you when you bake biscuits at home and when you select them in cafeterias or elsewhere. Not all these standards apply to drop biscuits.

1. Are the biscuits well shaped, with straight sides and flat or slightly rounded tops? Lopsided and bulgy biscuits are not desirable.

2. Is the top crust tender, fairly smooth, and golden brown? Pale crusts are not appetizing and may indicate underdone biscuits. Dark brown crusts generally indicate dry, overbaked biscuits.

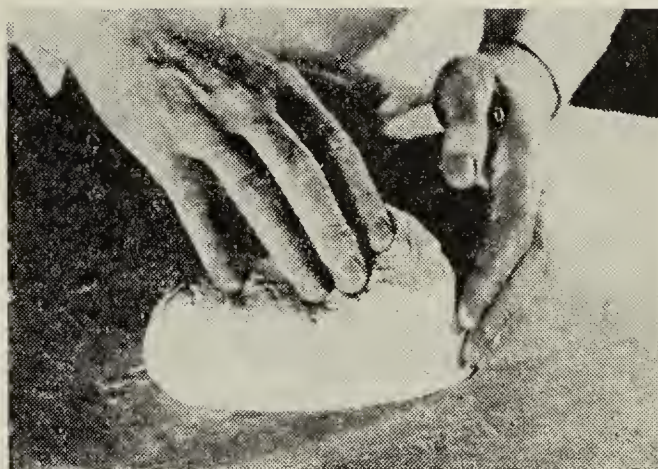
3. Is the texture inside of the biscuit fine and tender? Tiny, even holes mean that the biscuit is light and fluffy, not soggy or heavy.

4. Is the biscuit flaky so that, when pulled apart, the inside comes off in layers?

BAKING POWDER BISCUITS



1. Mix carefully and quickly to form light, soft dough.

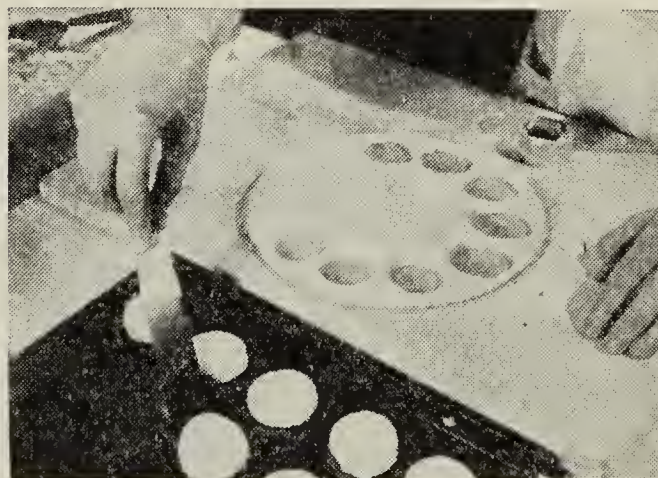


2. Knead lightly for just 30 seconds to mix thoroughly.



Calumet Baking Powder Company

3. Pat dough into shape lightly with floured rolling pin.



4. Place biscuits 1 inch apart on ungreased sheet.

CLASS PROJECT: VARIATION OF BASIC RECIPE FOR BISCUITS.

Plan to make biscuits according to one of the variations suggested on page 300 or another variation which you may wish to try.

1. Plan to have a different variation tried by each group in the class. These variations might include emergency or drop biscuits, sour milk and soda biscuits, whole-wheat biscuits, orange biscuits, and cinnamon rolls.

2. Discuss your mistakes in making your first biscuits and how to correct them.

3. Make a work schedule which will leave sufficient time for comparing and judging the biscuits.

4. During the last part of the class period, compare the biscuits made by the different groups. Judge the biscuits by the points given in Standards for Judging Biscuits on page 122.

5. Is the inside color creamy white?

6. Is the volume great enough to allow a soft, flaky interior? Biscuits should rise to approximately twice the unbaked volume.

7. Is the flavor pleasing and well blended? Biscuits should not taste of any one ingredient—flour, fat, or salt.

Diagnosing your troubles in biscuit-making. Skill in making biscuits can be attained most easily when one is able to analyze the reasons for failures. If your biscuits are not as good as they should be, try to find the reason so that you will not make the same mistake again.

*Biscuit troubles*¹

When biscuits are heavy and compact, with tough crust, the cause may be:

Overmixing or overkneading of dough.

Not enough baking powder.

Too much liquid.

Oven not hot enough.

Too much flour worked in while kneading.

Not enough shortening.

When biscuit crust is pale, the cause may be:

Oven not hot enough.

Biscuits baked in too-deep pan.

Too much flour.

When biscuit is poor in volume, the cause may be:

Not enough baking powder.

Oven not hot enough.

When biscuits are light but not flaky, the cause may be:

Shortening too finely cut in.

Insufficient kneading of dough.

When biscuits are shapeless, the cause may be:

Too much liquid, giving too-soft dough.

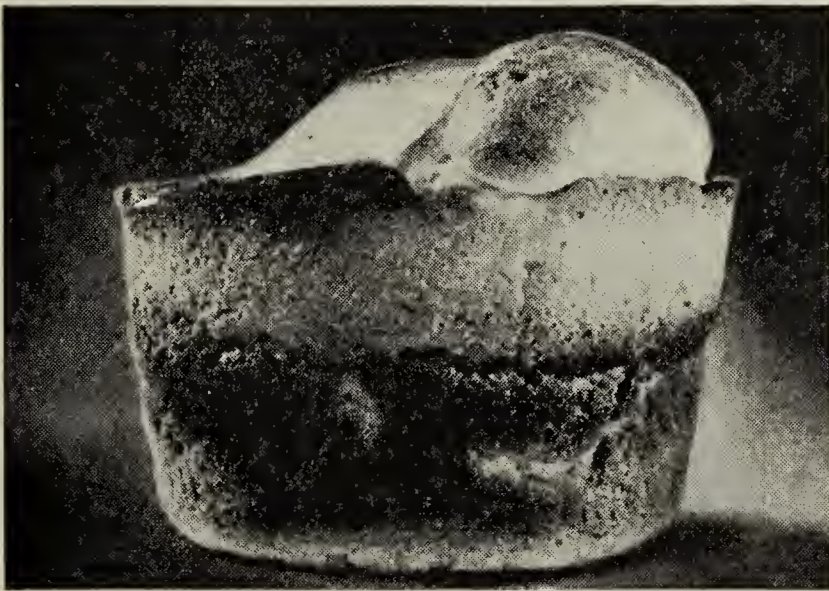
Uneven rolling or patting out of dough.

Careless cutting or placing on baking pan.

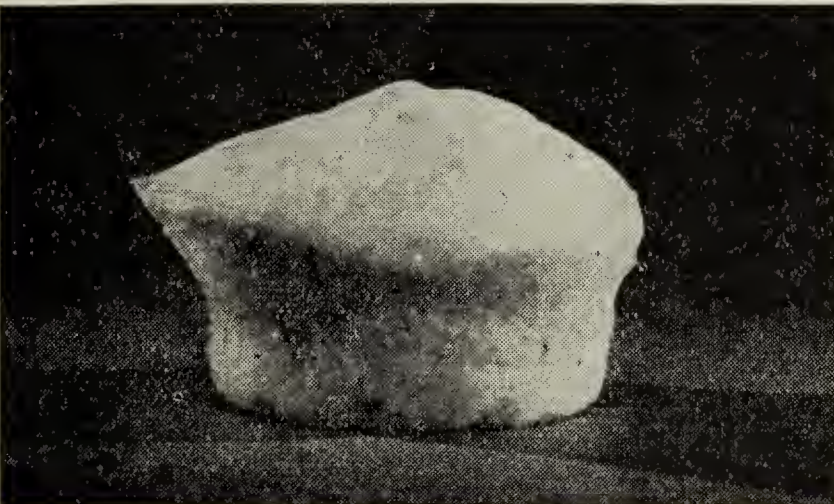
¹ *Baking Secrets*, published by General Foods Corporation. 1944. P. 35.



Muffins (whole) baked at optimum temperature have good volume, a symmetrical shape with well-rounded top, and pebbled surface—all characteristic of a good muffin. Muffins (cut) baked at optimum temperature have a fine, even grain, fluffy appearance, and thin crust.



Muffins (whole) baked at too hot a temperature have smaller volume, knoblike projections, cracked top crust, and are too brown in color. Muffins (cut) baked at too hot a temperature have coarse grain, compact appearance, and thick crust.



Robertshaw Thermostat Company

Muffins (whole) baked at too low a temperature have low volume, poor shape, and pale color. Muffins (cut) baked at too low a temperature have a soggy, compact interior of underdone baked product.

CLASS PROJECT: MAKING PLAIN MUFFINS.

Your aim in this lesson is to make perfect muffins.

1. Read the general directions for making muffins and study the pictures on the opposite page. Also study the basic muffin recipe on page 131.

2. Watch a demonstration of muffin preparation, checking each step with the general directions and pictures.

3. Make a work schedule which will leave sufficient time for comparing and judging the muffins.

4. Work quickly. Remember to do as much dishwashing and clearing up as possible without interfering with your speed in baking the muffins.

5. Arrange your muffins on a plate. Break one muffin in half and lay the broken sides up. Give a number to each plate of muffins. Let the members of the class vote for the muffins which they think are most nearly perfect. If there is not time for this judging on the day when the muffins are baked, they can be put away carefully and judged the next day.

SAFETY WARNING: Remember the rules for lighting the oven safely. Refer back to the safety rules on page 121.

Standards for judging muffins. The quality of a muffin depends upon the following characteristics:

1. Is the muffin symmetrically shaped with a well-rounded top with no peak or knobs?

2. Is the top evenly and lightly browned?

3. Is the inner part of the muffin fine and even in texture? Big tunnels or holes are caused by overbeating or too hot an oven. Overbeating is a very common mistake in making muffins.

4. Is the muffin very light? Good muffins are surprisingly light for their bulk.

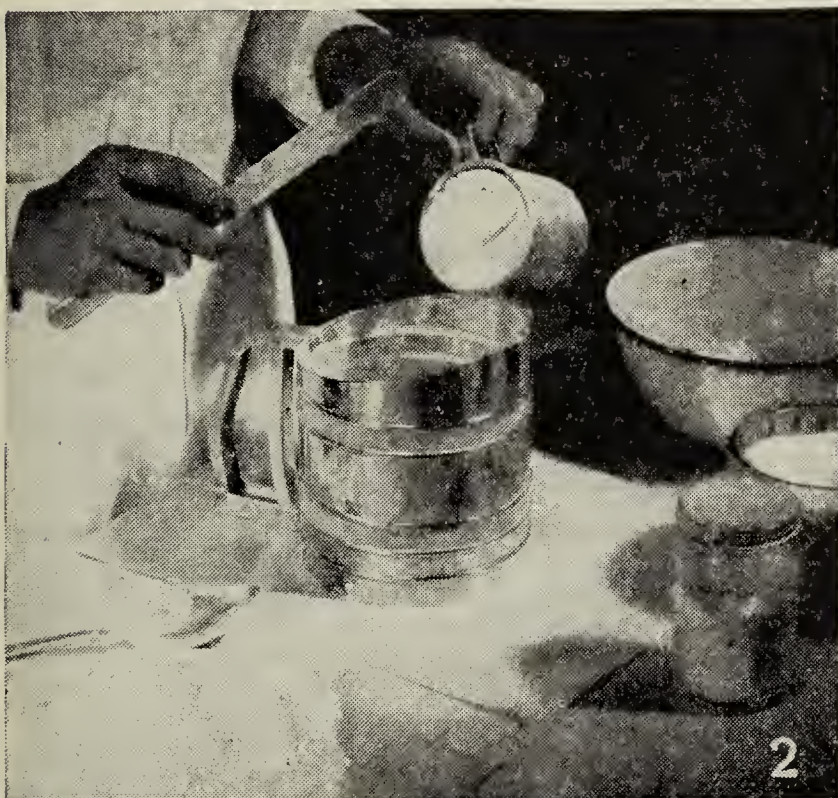
5. Is the crust crisp but not heavy, and slightly shiny in texture?

Diagnosing your muffin difficulties. Muffins are baked with the oven heat control set at 400° F. to 425° F., and it is important that baking temperatures for muffins fall within this range. Higher temperatures set the crust before the batter has time to rise, and the resulting muffins are misshapen and heavy. Frequently they crack and form objectionable peaks. Lower temperatures produce muffins that are pale in color, lack a crisp crust, and are coarse in texture.

If your muffins are not perfect, you may be able to discover your mistake by studying the reasons for failures.

MAKING MUFFINS

1. Assemble equipment and ingredients. Grease muffin pans.
2. Measure flour accurately.
3. Sift dry ingredients together.
4. Combine other ingredients, add to flour mixture, and stir.
5. Fill muffin pans half full of batter.



General Mills, Inc.

*Muffin troubles*¹

When muffins are heavy, the cause may be:

Overmixing or too slow mixing.
Too much flour.
Too much liquid.
Not enough leavening.
Oven not hot enough.

When muffins have sharp peaks or knobs on top and tunnels inside, the cause may be:

Overmixing of batter.

If the muffins have too-heavy crusts, the cause may be:

Use of overgreased pans.
Baked too long or in too-hot oven.

Semiprepared mixtures for quick breads. Food manufacturers have developed several types of semiprepared mixtures which are timesavers for the busy homemaker. These mixtures generally contain all the dry ingredients plus the shortening. All that is necessary in the case of the biscuit-mix is to add the liquid and handle the dough in the usual way. Muffin mixtures generally require the addition of the liquid and eggs to complete the batter. Excellent directions for the use of each mixture are printed upon the outside of the package. Most of these ready-mixed quick-bread preparations give good results. Biscuits and muffins compare very favorably with those made by the usual method. A variety of muffin mixtures is obtainable, including corn muffins and soya muffins.

Basic biscuit recipe

MAKES 18 SMALL BISCUITS

2 c. sifted all-purpose flour
1 t. salt
4 t. baking powder

4 T. shortening
 $\frac{3}{4}$ c. milk or water

SIFT flour, measure 2 c.; add 1 t. salt, 4 t. baking powder; sift into a bowl.
TURN oven to 450° F.
CUT in 4 T. fat until the mixture is crumbly.
ADD $\frac{3}{4}$ c. milk and stir just enough to make a soft dough.
FLOUR board or pastry cloth slightly, turn out dough, pat gently $\frac{1}{2}$ to $\frac{3}{4}$ inch thick, cut with a floured biscuit cutter or into two-inch squares or wedges, and place biscuits on an ungreased baking sheet.
BAKE in a hot oven (450° F.) 10 to 12 minutes.

¹ *Baking Secrets*, published by General Foods Corporation. 1944. P. 35.

TEMPERATURES AND TIME USED IN BAKING

TYPE OF PRODUCT	OVEN TEMPERATURE	BAKING TIME
	<i>degrees F</i>	<i>minutes</i>
Breads		
Biscuits.....	425 to 450	10 to 15
Cornbread.....	400	30 to 35
Muffins.....	400 to 425	20 to 25
Popovers.....	450, then 350	15 30
Quick loaf breads.....	350 to 375	60 to 75
Yeast bread.....	400	30 to 40
Yeast rolls, plain.....	400 to 425	15 to 25
sweet.....	375	20 to 30
Cakes, with fat		
Cup.....	375	15 to 25
Layer.....	375	25 to 40
Loaf.....	350	45 to 60
Cakes, without fat		
Sponge and angel.....	300 to 350	45 to 60
Cookies		
Drop.....	350 to 400	8 to 15
Rolled.....	375	8 to 10
Eggs, meat, milk, and cheese dishes		
Cheese soufflé (baked in a pan of hot water).....	350	30 to 60
Custard, plain, corn, etc., baked in a pan of hot water.....	350	30 to 60
Macaroni and cheese.....	350	25 to 30
Meat loaf.....	300	60 to 90
Meat pie.....	400	25 to 30
Rice pudding (raw rice).....	300	120 to 180
Scalloped potatoes.....	350	60
Pastry		
One-crust pie (custard type).....	450, then 350	15 25 to 30
Pre-baked shell with filling.....	350	25 to 30
Shell only.....	450	8 to 10
Two-crust pies.....	425	30 to 45

TERMS COMMONLY USED TO DESCRIBE
OVEN TEMPERATURES

TERM	TEMPERATURE
	<i>degrees F</i>
Very slow	250 to 300
Slow	325
Moderate	350 to 375
Moderately hot	400
Hot	425 to 450
Very hot	475 to 500

From *Handbook of Food Preparation* by the American Home Economics Association.

Biscuit variations

EMERGENCY BISCUITS

Use the same ingredients as for the basic biscuit recipe with the exception of one cup of liquid instead of $\frac{3}{4}$ cup. Emergency biscuits are dropped from a teaspoon on a greased baking sheet.

CINNAMON BISCUITS

- ROLL or cut the basic biscuit dough $\frac{1}{4}$ inch thick.
SPRINKLE with a mixture of 4 t. sugar and 1 t. cinnamon.
TURN oven to 350° F.
ROLL the dough in jelly-roll fashion, pressing the final edges securely together.
CUT in $\frac{3}{4}$ -inch pieces and place cut side down on a greased baking sheet; bake in a moderate oven (350° F.) for fifteen minutes.

SOUR MILK OR BUTTERMILK BISCUITS

Use the basic biscuit recipe, substituting $\frac{1}{2}$ t. soda for 2 t. baking powder, and sour milk or buttermilk for sweet milk.

ORANGE MARMALADE BISCUITS

- TURN oven to 350° F.
ROLL basic biscuit dough $\frac{1}{4}$ inch thick.
SPREAD with 4 t. orange marmalade.
ROLL jelly-roll fashion, pressing the final edges lightly.
CUT in $\frac{3}{4}$ -inch slices and place in greased muffin tins cut side down.
BAKE in a moderate oven (350° F.) for fifteen minutes.

SOYBEAN BISCUITS

Use the basic biscuit recipe, using $1\frac{3}{4}$ c. white flour and 4 T. soya flour.

QUICK PECAN ROLLS

- | | |
|------------------------------------|--|
| 2 T. butter or fortified margarine | basic biscuit recipe |
| 3 T. brown sugar | $1\frac{1}{2}$ T. melted butter or fortified margarine |
| $\frac{1}{3}$ c. chopped pecans | 2 T. brown sugar |
| 2 T. honey, maple, or corn syrup | |
- CREAM 2 T. butter or fortified margarine with 3 T. brown sugar and sprinkle in the bottom of a cake pan 8 x 8 x 2 inches. Cover with $\frac{1}{3}$ c. chopped nuts and 2 T. honey, maple, or corn syrup.

TURN oven to 450° F.
 PREPARE basic biscuit dough and roll to ¼ inch thickness; spread with 1½ T. melted butter or margarine and sprinkle with 2 T. brown sugar.
 ROLL jelly-roll fashion; cut in one-inch slices; and place cut side down in pan.
 BAKE in a hot oven (450° F.) for fifteen minutes.

Basic muffin recipe

MAKES 12 TWO-INCH MUFFINS

1¾ c. sifted all-purpose flour	½ t. salt
3 t. baking powder	3 T. melted shortening
2 T. sugar	1 egg, well beaten
1 c. milk	

SIFT flour, measure 1¾ c.; add 3 t. baking powder, 2 T. sugar and ½ t. salt; sift into a bowl and make a well in the center.

TURN oven to 425° F.

GREASE muffin pans.

BEAT egg until light; add 1 c. milk and 3 T. melted shortening.

ADD egg mixture all at once to flour and stir only until flour is moistened and well combined. Do not attempt to beat until smooth. Remove all batter from mixing spoon and sides of bowl.

WITH a tablespoon fill the muffin pans half full of batter, dividing the batter evenly so that all the muffins will be the same size.

BAKE in a hot oven (425° F.) for 20 to 25 minutes.

NOTE: Smaller muffin pans may be used, making from 15 to 20 muffins. To keep muffins or hot breads warm, use a napkin or a hot-bread cloth, opened, on a plate and place the muffins on it, bringing the four corners up over the muffins to keep out the cool air.

Muffin variations

BUTTERMILK OR SOUR MILK MUFFINS

Use the basic muffin recipe; substitute ½ t. of soda for 2 t. baking powder. Use 1 c. buttermilk or sour milk instead of sweet milk.

JELLY OR MARMALADE MUFFINS

In each muffin pan place ½ t. jelly or marmalade and cover with muffin batter, making pans one-half full. The addition of the jelly or marmalade will make two or more additional muffins.

SOYA MUFFINS

Use the basic muffin recipe, substituting 2 T. soya flour for 2 T. white flour.

BERRY OR APPLE MUFFINS

Use the basic muffin recipe, adding 1 T. additional shortening, 2 T. sugar, and $\frac{3}{4}$ c. berries or chopped apples. Add fruit at the same time the liquid is added. The addition of the fruit will increase the number of muffins.

BRAN MUFFINS

To the basic muffin recipe add 1 T. sugar and substitute $\frac{3}{4}$ c. whole-bran cereal for $\frac{3}{4}$ c. flour.

CORN MUFFINS

Use the basic muffin recipe. Substitute $\frac{3}{4}$ c. yellow corn meal for $\frac{3}{4}$ c. flour. Substitute $\frac{1}{2}$ t. soda for 1 t. baking powder. Use sour milk instead of sweet milk.

Recipes for other hot breads

SCONES

2 c. sifted cake flour	$\frac{1}{2}$ t. salt
4 t. baking powder	4 T. shortening
2 t. sugar	2 egg yolks and 1 egg white, well
$\frac{1}{3}$ c. top milk	beaten

Topping

1 egg white, beaten slightly	2 t. sugar
------------------------------	------------

SIFT	flour, measure 2 c.; add 4 t. baking powder, 2 t. sugar and $\frac{1}{2}$ t. salt; sift into a bowl.
CUT	in 4 T. shortening until crumbly.
TURN	oven to 450° F.
BEAT	1 egg white slightly; then beat the 2 egg yolks and 1 egg white well.
ADD	to the flour mixture, the well-beaten egg yolks and white and $\frac{1}{3}$ c. top milk; stir carefully until all the flour is moistened.
TURN	the dough on slightly floured board or pastry cloth and knead for thirty seconds; roll to $\frac{1}{2}$ -inch thickness and cut in squares and then triangles; place on ungreased baking sheet.
BRUSH	with slightly beaten egg white and sprinkle with 2 t. sugar.
BAKE	in a hot oven (450° F.) for 12 to 15 minutes. Serve hot.
NOTE:	Scones are delicious for afternoon tea. They may be slit and buttered before serving.

STEAMED BROWN BREAD

1½ c. sifted all-purpose flour	½ t. salt
1½ c. all-bran cereal	½ t. soda
¾ c. raisins	2 T. molasses
1½ t. baking powder	¾ c. sugar
1½ c. sour milk	

GREASE two cans which have tight covers, such as pound coffee or baking powder cans.

SIFT flour, measure 1½ c.; add 1½ t. baking powder, ½ t. soda and ½ t. salt; sift into a bowl.

MIX together 1½ c. bran, ¾ c. raisins, and 1½ c. sour milk.

ADD 2 T. molasses, ¾ c. sugar to flour mixture and mix well; place in the greased cans and cover tightly.

STEAM for three hours.

REMOVE the bread from the cans and place on a cooler to cool or serve hot.

NOTE: Brown bread makes mighty good sandwiches with a cream cheese filling.

JOHNNYCAKE OR CORN BREAD

1 c. yellow corn meal	2 T. sugar
1¼ c. sifted all-purpose flour	¾ t. soda
4 t. baking powder	3 T. melted shortening
1 t. salt	2 eggs, well beaten
1¼ c. sour milk or buttermilk	

SIFT flour, measure 1¼ c.; add 1 c. corn meal, 4 t. baking powder, 1 t. salt, 2 T. sugar and ¾ t. soda; sift together in a bowl.

GREASE cake pan 8 x 8 x 2 inches.

TURN oven to 425° F.

BEAT 2 eggs well; add 1¼ c. milk and 3 T. melted shortening; add to flour mixture and mix well.

POUR into greased pan and bake in hot oven (425° F.) for 40 minutes or until done.

CUT into squares and serve hot.

SPOON BREAD

SERVES 4

½ c. uncooked yellow or white corn meal	1 t. baking powder
¼ c. cooked hominy grits	1½ c. milk
1 c. boiling water	½ c. buttermilk
½ t. salt	2 T. butter or margarine
1 t. sugar	3 egg yolks, well beaten
	3 egg whites, beaten stiff

COOK	$\frac{1}{4}$ c. hominy grits in 1 c. boiling water for 25 minutes.
SOAK	$\frac{1}{2}$ c. corn meal in $\frac{1}{2}$ c. cold milk.
SCALD	1 c. milk.
TURN	oven to 350° F.
MELT	2 T. butter or fortified margarine in baking dish.
BEAT	3 egg whites until stiff and then 3 egg yolks until light.
COMBINE	corn meal, cooked grits, 1 t. baking powder, $\frac{1}{2}$ t. salt, 1 t. sugar, scalded milk, $\frac{1}{2}$ c. buttermilk, and beaten egg yolks; mix well.
FOLD	in stiffly beaten egg whites; pour on to melted butter in baking dish.
BAKE	in a moderate oven 350° F. for 1 hour. Serve at once.
NOTE:	Spoon bread may be served at the table from the baking dish in which it is baked. It looks like a soufflé. Spoon bread is a good buffet supper dish.

CLASS ACTIVITIES

1. List the quick breads which are eaten regularly by members of the class. Which are the favorites? Do any families you know speak of muffins as gems? Or corn bread as johnnycake? These old-fashioned names are pleasant sounding. Do you know other name variations for quick breads?

2. In what part of the country do you live, if you speak of biscuits as "bread" and ordinary yeast bread as "white bread"? Where do you live if you speak of yeast bread as "bread," and biscuits as "biscuits."

3. What is the most common fault that you have observed in biscuits? In muffins? What do you think is the reason?

4. Figure the difference in price between a dozen biscuits made from the home-prepared mixture and a dozen made from a semiprepared mixture. Estimate the cost of the ingredients in terms of weight. Find out how much a cup of flour weighs and what part of a pound of shortening is required for the home-prepared mixture. The weight of the semiprepared mixture is given on the package, and you can determine what portion of it is required for the dozen biscuits. Last, find out how many minutes are saved by using the semi-prepared mixture.

5. Invite guests to a tea party at which you serve several different kinds of biscuits, muffins, or scones. Make them small and dainty. This might be a nice way of serving refreshments for a Mother's Club or Parent-Teachers' Association meeting.

FUN WITH FOOD AT HOME

1. Prepare and serve five different quick breads at family meals.
2. Time yourself on making biscuits in your own kitchen. What is your best speed at making good biscuits?

3. *Hot off the griddle!*

Some cereal foods are prepared for the table by cooking them on a griddle or in a frying pan. Griddle cakes, also called pancakes or hot cakes, are well known to the American table. Waffles, which are near relatives of the pancakes, are baked in a special kind of griddle. These two foods should be served very hot, straight from griddle to plate, and generally are eaten with butter and sirup, strained honey, marmalade, or other sweet. Other cereal foods prepared in the frying pan are French toast and fried mush. These, too, should be served very hot, and are eaten with butter and sirup.

In past periods of history, many of the quick breads now ordinarily baked in the oven were cooked in a skillet. The great-great-grandpapa of our corn bread was the johnnycake of pioneer days. Every man who journeyed westward over hazardous trails carried his sack of corn meal and baked his "journey cake" on his iron skillet. Later the name was changed to "johnnycake." These cakes were baked as we bake pancakes, by dropping spoonfuls of batter on the hot griddle and turning the cake to brown on both sides. Modern johnnycake is usually baked in the oven. In the South it is dropped by spoonfuls on a baking sheet, and in the North it is poured into a baking pan.

Virginia hoecake and corn pones of the South are other quick breads which were often baked on a griddle. Hoecake received its name because originally it was baked on the metal blade of a hoe or spade which could be held over heat in an open fireplace. Scones are of Scottish origin and were originally baked on a griddle.

Quick breads are not often prepared on griddles in our modern kitchens. It is much simpler to bake them in our fine, heat-controlled ovens. However, the home cook should be skillful at making pancakes, waffles, and fried or sautéed breads.

Baking and serving griddle cakes. Pancakes served with butter and syrup make a very hearty dish and are equally acceptable for family or company meals. Sunday night suppers, when the guests take turns flipping the cakes and rushing them to the table hot, can be very jolly.

A famous chain of restaurants first made its reputation by installing stoves and griddles in the front windows, where people could see the chef flipping hot cakes and sending them to the tables piping hot. Since that time many other restaurants have made a feature of their kitchens by placing them in full view.

CLASS PROJECT: GRIDDLE CAKES OR WAFFLES.

Make griddle cakes or waffles, and serve with brown sugar sirup or other sweet accompaniment.

1. Read the general discussion of griddle cakes and waffles given in this problem and study the recipes on pages 140 to 141.

2. Watch a demonstration of making griddle cakes and a demonstration of making waffles. Follow each process with the steps given in the recipes.

3. Let each group draw lots as to whether they will make griddle cakes or waffles.

4. Make a work schedule and plan your exact procedure. Be sure of what you are going to do, then work quickly.

5. Hold a clinic over your hot cakes. Judge them according to the standards given on page 138.

Griddle cakes, like cooked cereals, vary considerably in consistency and texture. Some like them thin and some like them thick! Old-fashioned cookbooks have recipes for "flannel cakes" which are thick and fluffy in texture. The name is hardly appetizing, but many people prefer pancakes which are breadlike in texture. Others prefer their cakes very thin and moist. The consistency of the batter controls the type of pancake. A very thick batter puffs up into a cake with porous texture, and a thin batter rises very little, making a much more delicate cake. Batters of different consistency are obtained by varying the proportions of liquid to flour.

The ingredients required for griddle cakes are the same as those for muffins, but the ingredients are combined in different proportions. Cakes can be made from flour, salt, baking powder, and liquid but their quality is improved by adding eggs, fat, and sugar. Melted fat or oil added to the liquid makes the cakes more tender, and eggs improve their flavor and appearance. A little sugar helps them to brown nicely.

Griddle cakes, like muffins, should be stirred only until the flour is moistened and no dry flour can be seen. A slightly lumpy batter is better than a perfectly smooth one. Too much stirring will cause the cakes to be tough and soggy.

The griddle should be hot, but not too hot. It is ready when a drop of water rolls around like quicksilver, or if it smokes slightly; but is too hot if it smokes enough to irritate the nose. Iron griddles should be slightly oiled, but can be used without oiling if the recipe contains two tablespoons of fat per cup of liquid. Aluminum griddles generally do not have to be oiled if the recipe contains one tablespoon of fat per

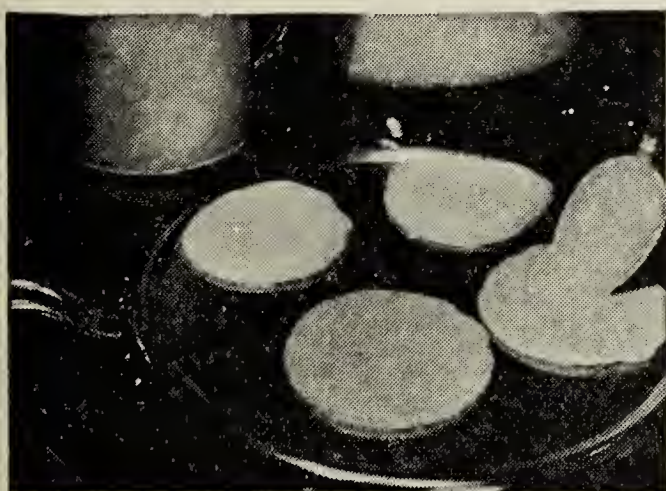
GRIDDLE CAKES



1. A few turns of the egg beater will make batter smooth.



2. When bubbles of water dance on griddle, it is ready.



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3. Drop batter on griddle, holding tip of spoon down.



4. Turn cakes only once, browning on both sides.

CLASS PROJECT: A LUNCHEON WITH FRENCH TOAST OR FRIED MUSH (SAUTÉED).

Prepare and serve a luncheon with either French toast or fried mush as the hearty food.

1. Study the recipes for French toast and fried mush given on pages 140 to 142.
 2. Watch a demonstration of preparing French toast and fried mush.
 3. Plan a luncheon combining one of these sautéed foods with other dishes. Try to plan a menu that will furnish a good combination of flavors and balanced nutritive values. Not all the luncheons need be alike.
 4. Make a work schedule for preparing, serving, and clearing away after the luncheon. If your class periods are short, this planning should be done in previous lessons.
 5. Work quickly, but try to keep your kitchen tidy as you work. A dish rinsed off after being used is more easily washed than one left sticky with food.
 6. Criticize your own work for appetizing quality of foods, balanced menu, preparation of foods, serving.
-

cup of liquid. A griddle which is too hot will scorch the cakes, and one that is too cool will cause the cakes to be compact and tough. It is a good idea always to test the griddle by dropping a few drops of batter on it.

Pancakes should be turned only once in the baking, as extra flips may cause them to lose their lightness. They should be served instantly when done, never stacked and kept in the warming oven. Stacked hot cakes steam and become soggy in a very short time. Good griddle cakes are served very hot, straight from griddle to plate.

Standards for good griddle cakes. What are the special characteristics of good pancakes?

1. Thickness depends on personal preference.
2. Fine-grained, light and tender.
3. Evenly browned on both sides without crusty edges.
4. Cooked all the way through with no raw spots inside.
5. Pleasing, well-blended flavor (not doughy).

Making and serving waffles. Waffles baked in a chromium-plated electric waffle iron seem very modern, but our colonial forefathers enjoyed this very delightful food. In those days, waffles were baked in heavy long-handled waffle irons held over the open fireplace. It must have been a tedious and clumsy process compared with the ease of operating a handy electric waffle iron.

The standard waffle recipe is closely related to the griddle cake recipe. The ingredients are the same, except that more fat and eggs are used and, generally, the whites and yolks of the eggs are separated.

The whites are beaten and added last in order to increase the lightness and fluffiness of the batter. Unlike griddle cakes, the batter for waffles may not vary from thin to thick. It should be of medium consistency. If too thin, the waffles will be soggy, and if too thick they will not be crisp.

Waffles are generally served with butter and syrup, but make an excellent foundation for creamed chicken or creamed eggs. For a very rich and luscious dessert, try waffles topped with a layer of chocolate or strawberry ice cream. The waffles may be further enhanced by dropping some pecan meats into the batter.

Standards for good waffles. The desirable waffle differs sharply from the desirable griddle cake in one characteristic. A good waffle is crisp; a griddle cake is not. The special features of good waffles are:

1. Well-formed waffles which just fill the iron.
2. Evenly browned on both sides.
3. Tenderness.
4. Crispness.
5. Good flavor which is well blended.

Making and serving French toast. This dish is quickly and easily prepared. It merely requires beating the eggs, adding the milk and salt, dipping the stale bread into the egg mixture, and browning in hot fat. French toast is adaptable for breakfast, lunch, or supper. Combined with broiled bacon, fruit cup, or salad, it makes a delicious and hearty food.

French toast should be served hot and fresh from the frying pan. The sautéing or frying process should be done in a medium-hot skillet which neither scorches the toast nor leaves it underdone. Perfect French toast is golden brown on both sides.

Preparing and serving sautéed mush. Mush for frying must be prepared beforehand so that it will be cold and ready to slice. An extra amount can be cooked for breakfast cereal, and the leftover portion poured into a small bread pan. The slices should be sautéed slowly to prevent scorching. When it is lightly browned it is ready to serve with syrup, jelly, or marmalade. Other cereals, such as cream of wheat and oatmeal, are also good when sliced and fried.

Semiprepared mixes are convenient. For many years homemakers have depended on "pancake flour" for quick and easy meal preparation. Very likely you have a box of semiprepared mixture for hot cakes in your own kitchen. Read the label for ingredients and compare with the recipe for pancakes on page 140 and the recipe for waffles on page 141.

Recipes for foods from the griddle

PANCAKES OR GRIDDLECAKES

MAKES 12 TO 15 CAKES

1½ c. sifted all-purpose flour	¾ t. salt
3 t. baking powder	1 c. milk
2 T. sugar	3 T. melted shortening
1 egg, beaten until light	

SIFT flour, measure 1½ c.; add 3 t. baking powder, 2 T. sugar, and ¾ t. salt; sift into a bowl.

BEAT 1 egg until light; add ¾ c. milk, 3 T. melted shortening; then pour into sifted flour; mix until flour is moistened.

HEAT griddle or iron skillet. Grease lightly if necessary with unsalted fat. An aluminum griddle does not need to be greased.

POUR batter on griddle, making three or four cakes at a time.

BAKE until the top is full of little air bubbles; turn to reverse side with a broad spatula or cake turner and brown. Serve at once with sirup, honey, sugar, or preserves.

NOTE: Griddle cakes should be a golden brown; if too brown, reduce heat; if not brown enough, increase heat.

POTATO PANCAKES

SERVES 4

2 c. grated raw potatoes	1 t. salt
¼ c. milk	⅛ t. pepper
1 egg, slightly beaten	1 T. finely chopped onion
2 T. flour	fat for frying

BEAT egg slightly; add 1 t. salt, 2 T. flour, ⅛ t. pepper and ¼ c. milk; beat.

WASH potatoes; pare, and grate 2 c. Add with 1 T. chopped onion to egg mixture. Mix well.

PLACE 1½ T. fat in frying pan; drop pancakes by tablespoonfuls and brown on one side; turn and brown on other side until crisp. Serve at once.

SAUTÉED MUSH

SERVES 4-6

PREPARE mush, using recipe on page 119. Pack in a greased bread pan. Cover with waxed paper to prevent a crust from forming on top. Chill.

CUT mush in ½-inch slices and dredge with flour.

HEAT ¾ T. bacon drippings or other shortening in a frying pan and sauté mush slowly; turn from one side to the other. Serve with maple sirup or mock maple sirup.

SUNDAY MORNING BREAKFAST

Stewed Prunes
Sautéed Mush with Sirup
Broiled Bacon
Milk Coffee

SUPPER

Sautéed Mush with Sirup
Ham and Eggs
Buttered Beans
Tomato and Cucumber Salad
Bread and Butter
Apple Pie
Milk Coffee

BROWN SUGAR SIRUP

MAKES 1 C. SIRUP

1 c. dark brown sugar, firmly packed
F. G. salt $\frac{1}{2}$ c. water
 $\frac{1}{4}$ t. vanilla

PLACE 1 c. sugar, F. G. salt, $\frac{1}{2}$ c. water in saucepan and bring to boil; cover and simmer for ten minutes. Keeping a cover on while cooking prevents crystals from forming around the edges of pan.

REMOVE from heat, add $\frac{1}{4}$ t. vanilla, and store in a covered glass jar in a cool place.

NOTE: For mock maple sirup, use the same method as for brown sugar sirup, adding 1 t. maple flavoring.

WAFFLES

SERVES 4

$1\frac{1}{2}$ c. sifted all-purpose flour $3\frac{1}{2}$ T. melted shortening
3 t. baking powder 2 egg yolks, well beaten
 $\frac{1}{2}$ t. salt 2 egg whites, stiffly beaten
1 c. milk

SIFT flour, measure $1\frac{1}{2}$ c.; add 3 t. baking powder and $\frac{1}{2}$ t. salt; sift into a bowl and make a well.

MELT shortening over low heat.

BEAT 2 egg whites until stiff; then beat 2 egg yolks until light.

ADD 1 c. milk and $3\frac{1}{2}$ T. melted shortening to egg yolks; then pour into dry ingredients. Mix gently and fold in egg whites.

BAKE on a hot waffle iron until a golden brown. Serve at once with sirup.

NOTES: If the waffle iron is sticking, the addition of a little fat on the iron may be necessary.

Waffles topped with ice cream make a delicious dessert.

SUNDAY NIGHT SUPPER

Waffles
Creamed Chicken
Vegetable Salad
Milk Coffee

FRENCH TOAST

SERVES 4

8 slices day-old bread, $\frac{1}{2}$ inch thick $\frac{1}{4}$ t. salt
2 eggs, well beaten 2 T. butter, fortified margarine, or
1 $\frac{1}{4}$ c. milk bacon drippings

BEAT 2 eggs; add $\frac{1}{4}$ t. salt and 1 $\frac{1}{4}$ c. milk, and beat.

HEAT a heavy skillet and melt some of the fat in the skillet.

DIP 2 or 3 slices of bread into the egg mixture and put them in the skillet to cook. When brown, turn the slices to the other side and continue to cook. Add more fat when necessary.

SERVE with syrup, honey, or preserves.

NOTE: French toast is a good breakfast or lunch dish which uses left-over bread that might otherwise be wasted.

BREAKFAST

Half Grapefruit
French Toast and Sirup
Broiled Bacon
Milk Coffee

LUNCH

French Toast and Sirup
Fruit Cup or Salad
Milk Coffee

CLASS ACTIVITIES

1. Discuss the cereal foods that you know which can be prepared on a griddle.
2. Compare notes on pancakes. Do you like them thick or thin? What is the preference of the majority in your class?
3. Compare the cost of home-mixed and ready-mixed pancakes. Proceed with this problem as you did with the comparison of semiprepared quick breads and home-mixed quick breads.
4. Experiment with the same amount of batter in two different ways: (a) Bake two thick cakes, using 1 large spoonful to each cake. (b) Put 2 large spoonfuls in another bowl, add enough milk to thin the batter, and bake three thin cakes the same size as the two thick cakes.

FUN WITH FOOD AT HOME

1. Arrange a small supper party, and serve waffles as the chief part of your refreshments.
2. Experiment with grilled toast and sandwiches in your waffle iron. A peanut butter or cheese sandwich can be "dressed up" considerably by toasting it in the waffle iron.
3. Add basic recipes for pancakes and waffles to your collection. Try out any variations which you think would be good.

4. Main dishes and desserts from the oven

A variety of hearty and appetizing dishes for luncheon, dinner, or supper can be made from the grain products. The macaroni family and rice are used for oven casseroles such as macaroni and cheese, baked noodle ring, and Spanish rice. These hearty main dishes are tasty and economical substitutes for meats. Rice puddings and other rice desserts also add a substantial number of calories to a light luncheon or supper. Boiled rice with peaches, sirup, and cream makes a very filling and appetizing dessert dish.

The macaroni family. Macaroni and all its relatives—spaghetti, vermicelli, noodles, and others—are made from a kind of wheat called durum. This type of wheat has a very high gluten content which is important for its tenacity and strength. All macaroni products are made from the same dough or paste. The process consists of forcing the paste through small holes or slots, thus forming rods or tubes out of the paste. When these are dried, the product is ready for use.

Macaroni is made in the form of a tube about $\frac{1}{4}$ inch in diameter and is usually cut into short pieces. Spaghetti is a small tube and vermicelli a still smaller tube. Macaroni products are made in dozens of other forms, such as stars, shells, elbows, and daisies. Noodles are flat, ribbon-like strips and are cut in different widths. They must have some egg content unless they are labeled “plain noodles” or “water noodles.” According to government standards, noodles must contain $5\frac{1}{2}$ per cent of eggs by weight unless they are labeled as plain noodles.

All macaroni products are considered more desirable if they have a slightly yellowish color. Noodles, of course, are distinctly yellowish if they contain eggs. Some kinds of durum wheat are naturally yellow-white and impart a desirable color to macaroni products. The Food and Drug Administration does not allow macaroni products to be artificially colored or to be deceptively packaged in yellow cellophane.

Good macaroni keeps its shape when cooked, and swells to about twice its original size. It is tender but firm and not mushy or sticky. The flavor is bland, but not “starchy” or “musty.” Unfortunately, there is no way of detecting poor quality in macaroni products until they have been cooked.

Food values in macaroni products. Like other grain foods, the macaroni products provide high-energy fuel at low cost. The pastes are made chiefly from the endosperm of wheat kernels, and therefore

CLASS PROJECT: LUNCHEON OF BAKED NOODLE RING, MACARONI AND CHEESE, OR SPAGHETTI CASSEROLE WITH A GREEN SALAD.

Prepare and serve a casserole using one of the macaroni products. Serve it with a green salad, such as tossed vegetable salad, cole slaw, or spinach salad.

1. Plan a casserole and salad combination which will be appetizing, pleasing in appearance, and which will include several food values. This will require a good contrast of flavors, an interesting combination of colors and textures, and should include mineral and vitamin foods as well as high count in calories.

2. Study the recipes on pages 148 to 150, and read the accompanying discussion of macaroni dishes.

3. Watch a demonstration of making baked noodle ring, macaroni and cheese, and spaghetti casserole. Take notes, if necessary, so that you will remember each step in the process.

4. Plan the correct cover and service for your casserole dish and salad.

5. For this project plan to use two class periods if necessary. What can be done the first day? The second?

6. Be sure of your procedure, then work rapidly. Remember to wash dishes and utensils as you go, if it does not interfere with getting your dish into the oven.

7. Discuss the appearance of each luncheon. Why is it pleasing or how could it be improved? Let each group report on the appetizing qualities of the luncheon which it has prepared.

lack minerals, vitamins, and fibers contained in the bran and wheat germ. In addition to their starchy content, the pastes also contain about 10 to 13 per cent of protein, thus providing an economical energy food. When combined with other foods such as milk, cheese, or tomatoes in a main dish, the food values are supplemented with other nutrients.

Some manufacturers say that the macaroni pastes should be made with corn germ or wheat germ, or that they could be enriched just as breakfast foods and flour are enriched. This would be a highly desirable step in protecting the health of the many people who include the macaroni foods in their daily diet.

The preparation of macaroni oven dishes. The first step in preparing one of the macaroni products for a casserole dish is the preliminary cooking until it is tender. This is done in an excess of water which is drained off when the macaroni is done. The best method of pouring off the water is to put it through a sieve or colander so as to catch the macaroni without difficulty. The amount of time required for the preliminary cooking varies, but there is little danger of overcooking the pastes of good quality. Inferior grades, because of the poor quality of



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Macaroni and cheese is a hearty and popular main dish.

gluten, will become pasty and lose their form. Macaroni which is under-cooked has an unpleasant “rubbery” quality.

The second step in preparing a macaroni dish is the combining of the ingredients. In some cases the ingredients may be stirred together and poured into the baking dishes. Often, it is better to arrange the ingredients in layers and pour the sauce or liquid over them. This helps to prevent a mixture which is too well blended or “messy.”

The success of a casserole dish depends upon its appearance, flavor, and consistency. A thin, “runny” mixture which spreads all over one’s plate is not appetizing. A mixture that is so thick that it is solidly welded together is also disagreeable. Most people prefer a mixture that is firm enough so that a spoonful of it retains its shape, yet is moist enough for pleasant eating.

Food values in rice. White rice has lost some of its important nutrients in the milling process, but brown rice contains much of the natural protein, minerals, and B vitamins.

“Converted” rice, made by a modern commercial process, saves much of the original mineral and vitamin content in the grain. This method

CLASS PROJECT: A SIMPLE LUNCHEON WITH A RICE MAIN DISH OR DESSERT.

Prepare and serve a simple luncheon, consisting of a rice casserole and salad, or a party refreshment, consisting of a rice dessert and a beverage.

1. Study the recipes for Spanish rice, rice pudding, and "Glorified Rice" on pages 147 to 148.

2. Watch a demonstration of the preparation of these dishes. This should include the preliminary cooking of the rice. Each girl should have an opportunity to test and taste the rice to see if it is cooked enough.

3. Some groups should prepare the luncheon and others the party dessert. Plan a salad and a beverage to combine with the Spanish rice; plan a beverage and crispy wafer to serve with the dessert. Each group should plan separately and then report their menus to the whole class for mistakes.

consists of steaming the rice under pressure and drying it before milling. This spreads the vitamins of the bran and germ into the kernel. This conversion process also glazes the surface of the grains so that they do not break so easily in the milling process. When cooked, the grains of converted rice hold their shape much better and are not inclined to be sticky.

Rice dishes for main courses or desserts. Rice is a versatile grain which is used equally at home as a breakfast cereal, main dish, or dessert; in soups or croquettes; and as a substitute for a hearty vegetable. It is an extremely important article of food in the Orient and India. Although not used in nearly such tremendous quantities on the American table, it is steadily growing in popularity.

Among the many appetizing and nutritious rice casserole dishes are Spanish rice, Mexican rice, rice and vegetable casserole, and rice and mushroom loaf.

Some of the luscious and hearty rice desserts include combinations with fruits and custard sauces. The old-fashioned rice pudding has many modern variations: chocolate rice pudding, coffee, lemon, pineapple, or butterscotch pudding.

The first step in preparing a main dish or dessert with rice is exactly the same as with macaroni products. Preliminary cooking of the rice should be done in an excess of water, which is then drained off, leaving the rice dry and fluffy.

Many of the same general suggestions for combining macaroni and other ingredients apply also when combining rice with other ingredients. Baked rice dishes should not be "watery" or a solid mass.

Recipes for rice dishes

BOILED RICE

SERVES 4

1 c. uncooked rice 8 c. boiling water
1 t. salt

PLACE 8 c. water and 1 t. salt in a large kettle, and bring to a boil.
WASH 1 c. rice in a bowl of water; then place the rice in a sieve and
 wash it under running water to remove the loose starch. Drain.
ADD rice to boiling water and cook until tender, lifting gently from
 time to time with a fork to prevent sticking.
PRESS rice grains between thumbnail and finger to test for doneness.
TURN oven to 250° F.
POUR rice in sieve or colander and run hot water through it to wash
 away the excess starch and to separate grains; drain.
PLACE rice in a casserole and put in very slow oven; cover with two
 thicknesses of terry toweling until ready to serve.
VARIATIONS: On the top of each serving of rice we might add one tablespoon
 of raisins, chopped dates, cooked cranberries, dried apricots, or
 prunes.

Brown rice may be cooked the same way but requires a longer
time to cook.

EASY RICE PUDDING

SERVES 4-5

½ c. uncooked rice ½ c. sugar
½ t. salt 4 c. milk
F. G. Nutmeg

TURN oven to 300° F.
BUTTER baking dish.
WASH ½ c. rice in a bowl of water; then place in a sieve and again wash
 under running water to remove loose starch. Drain.
PLACE rice, ½ t. salt, ½ c. sugar, and 4 c. milk in baking dish. Top with
 F. G. nutmeg, and place in a very slow oven (300° F.) for three
 hours.
TURN the brown top under every 20 minutes with a fork for the first 2
 hours. Serve hot or cold.

GLORIFIED RICE

SERVES 4

2 c. cooked rice, cooled ½ c. cream, whipped
1 c. drained crushed pineapple ¼ c. sugar
¼ lb. marshmallows (about 16) cut 1 t. vanilla
 in quarters

MIX gently 1 c. pineapple, $\frac{1}{4}$ lb. marshmallows, $\frac{1}{4}$ c. sugar, and 2 c. rice.
 WHIP $\frac{1}{2}$ c. cream; add 1 t. vanilla, and fold into rice mixture.
 LET stand in the refrigerator 4 hours before serving.
 SERVE in sherbet glasses.

SPANISH RICE

SERVES 4

2 $\frac{1}{2}$ c. cooked rice	2 c. canned or cooked tomatoes
1 small onion, chopped	2 T. butter or fortified margarine
$\frac{1}{4}$ c. chopped green pepper	$\frac{1}{2}$ t. salt
$\frac{1}{4}$ c. chopped celery	$\frac{1}{3}$ c. grated sharp cheese
F. G. pepper	

HEAT 2 T. butter or fortified margarine in skillet and sauté chopped onion, $\frac{1}{4}$ c. green pepper, and $\frac{1}{4}$ c. celery for 5 minutes.
 ADD 2 $\frac{1}{2}$ c. rice, 2 c. tomatoes, $\frac{1}{2}$ t. salt and F. G. pepper; bring to the boiling point; simmer gently for 5 minutes.
 ADD $\frac{1}{3}$ c. grated sharp cheese, and serve at once.

MEATLESS DINNER

Spanish Rice
 Tossed Vegetable Salad French Dressing
 Hot Biscuits
 Apple Crisp
 Milk Coffee

Recipes for macaroni dishes

BAKED MACARONI AND CHEESE

SERVES 4

1 $\frac{1}{2}$ c. macaroni, broken in pieces	8 c. boiling water
2 c. medium white sauce (page 74)	1 t. salt
$\frac{3}{4}$ c. medium-sharp cheese, cut in thin pieces	

PLACE 8 c. water and 1 t. salt in large kettle, and bring to boil.
 CUT $\frac{3}{4}$ c. cheese; butter casserole.
 ADD 1 $\frac{1}{2}$ c. macaroni to boiling water and cook for 9 to 12 minutes; pour into sieve or colander and rinse under cold running water. Drain.
 TURN oven to 350° F.
 PREPARE 2 c. medium white sauce; add $\frac{3}{4}$ c. cheese to white sauce while it is cooking.

PLACE half of the macaroni in the buttered casserole, pour over it half of the cheese sauce; repeat, having cheese sauce on top.

BAKE in a moderate oven (350° F.) for 25 to 30 minutes, or until the top is delicately browned.

DINNER SUGGESTIONS

Baked Macaroni and Cheese	Casserole of Meat and Spaghetti
Buttered Beets	Spinach Salad
Corn Bread	Shredded Cabbage and Carrot Salad
Canned Plums	Sour Cream Dressing
Milk	Cookies
Coffee	Cherry Delight
	Milk
	Coffee

MACARONI SOUFFLÉ WITH MUSHROOM SAUCE

SERVES 4

1 c. uncooked macaroni	1 T. chopped pimento
6 c. water	1 T. chopped green pepper
1 c. soft bread crumbs	1 c. grated sharp cheese
4 T. melted butter or fortified margarine	2 egg yolks, beaten light
1 T. chopped onion	2 egg whites, beaten stiff
1 T. chopped parsley	1 c. scalded milk

COOK 1 c. macaroni in 6 c. boiling water for 9 to 12 minutes. Pour into sieve or colander and rinse under cold running water. Drain.

TURN oven to 350° F.

PREPARE 1 c. bread crumbs; add 4 T. melted butter or margarine.

GREASE baking dish.

BEAT 2 egg whites until stiff; beat 2 egg yolks until light.

MIX macaroni; bread crumbs; 1 T. each of onion, parsley, pimento, and green pepper; 1 c. cheese; and egg yolks; then add 1 c. scalded milk.

FOLD in egg whites and pour into baking dish; bake in a moderate oven (350° F.) for 45 minutes.

SERVE at the table with mushroom sauce.

MUSHROOM SAUCE

1 c. sliced fresh mushrooms	1 T. butter or fortified margarine
1 c. medium white sauce (page 74)	1/8 t. salt
	1/8 t. pepper

MAKE 1 c. medium white sauce and let stand over hot water.

WASH mushrooms; stem and slice 1 c.; place in a skillet with 2 T. water, and simmer for 10 minutes.

ADD 1 T. butter or margarine to mushrooms and brown slightly; add mushrooms to white sauce; heat and serve with macaroni soufflé.

CASSEROLE OF MEAT AND SPAGHETTI

SERVES 4

1/4 lb. uncooked spaghetti	6 c. water
1 lb. ground beef, chuck	1/2 c. soft bread crumbs
1 can tomato soup	1/2 T. melted butter or fortified
1 can tomato paste	margarine
1 medium-sized onion, chopped	1 t. salt
1 medium-green pepper, chopped	1/4 t. pepper
1 1/2 T. fat	

BOIL 6 c. water and 1 t. salt; add 1/4 lb. spaghetti, and cook for 15 minutes; drain in sieve or colander, and rinse under running water. Drain.

GREASE baking dish and turn oven to 375° F.

PREPARE 1/2 c. crumbs and add 1/2 T. melted butter or margarine.

HEAT 1 1/2 T. fat in frying pan, and brown 1 chopped onion and 1 chopped pepper; add 1 lb. meat and brown.

ADD 1 can of soup and 1 can of paste to the meat; mix well; add spaghetti and gently mix. Pour into a baking dish and bake in a moderate oven (375° F.) for 30 minutes.

NOTE: Spaghetti sauce may be prepared as suggested and served over hot spaghetti without baking.

BAKED NOODLE RING

SERVES 4-6

2 c. dry noodles (4 oz.)	1 1/4 c. milk
4 c. water	2 eggs, slightly beaten
1/3 c. dry bread crumbs	1 t. salt
2 T. melted butter or fortified margarine	1/2 t. Worcestershire sauce

BOIL 4 c. water with 1 t. salt; add 2 c. noodles and cook for 10 minutes. Drain in a coarse sieve or colander; rinse with cold running water and drain.

BEAT 2 eggs slightly; add 1/3 c. dry bread crumbs, 2 T. melted butter, 1/2 t. Worcestershire sauce, and 1 1/4 c. milk.

GREASE noodle ring and turn oven to 350° F.

COMBINE egg mixture with noodles and pour into ring.

PLACE ring in a shallow pan with a little hot water and bake in a moderate oven (350° F.) for 45 minutes.

WHEN ready to serve, loosen edges of noodle ring with a broad spatula; place a large plate or platter over the top of mold and turn upside down. Fill center of noodle ring with creamed meat, vegetables, or eggs.

CLASS ACTIVITIES

1. Discuss other macaroni and rice dishes not mentioned in this unit. You may be familiar with such foods as macaroni and salmon salad, noodle soup, Italian spaghetti with meat balls, curry of rice, or rice pancakes.

2. Which of the following menus would you consider well planned? Why?

No. 1

Macaroni and Cheese Casserole
Potato Salad
Cinnamon Rolls
Rice Pudding
Cocoa

No. 2

Baked Noodle Ring
Combination Salad French Dressing
Whole-wheat Muffins
Baked Apple
Cocoa

3. How many members of the class have macaroni and rice dishes in their usual meals? Why can these foods be included advantageously in the weekly dinner or luncheon menus?

4. Can you buy "converted" rice in your stores? What brand?

5. If possible, visit a macaroni or cereal factory.

6. Experiment with rice desserts and try to originate a new combination of rice and fruit, a new and different variation of baked pudding, or a new type of sauce to pour over plain rice.

FUN WITH FOOD AT HOME

1. If your family is not already accustomed to macaroni and rice dishes, serve them with several main dishes and desserts. Report your success in persuading them to accept the new dishes.

2. Collect recipes for macaroni main dishes and for rice desserts.

5. Yeast breads: bakery and homemade

Our machine age has brought about a tremendous change in the handling and processing of everyday foods. Breadmaking, more than any other type of food preparation, has been completely revolutionized. The homemaker, who once mixed, kneaded, and baked on Wednesdays and Saturdays, now sends to the store daily for a loaf of baker's bread. Freshly baked every day, wrapped in a hygienic wrapper, and ready-sliced for the table, the commercial product is both nutritious

and appetizing. The critical mother-in-law can no longer object because her son's young wife does not make her own bread. More than likely, the mother-in-law buys her own bread at the store. Few homemakers now bake their own bread, finding it more convenient and economical to buy the bakery product. Many of them, however, like to bake rolls occasionally. There are many delightful variations of yeast bread recipes which tempt the eye and tease the appetite.

Whether you buy your bread or bake it, you should understand the characteristics of its chief ingredients and the general process of preparation. Then you will be better prepared either to bake your own loaf of bread or to select it at the store.

Gluten content of flour is important. Wheat can be classified into three general varieties: durum, hard, and soft. The gluten in durum wheat is very strong and so tenacious that flour from this type of wheat is not suitable for breadmaking, but is excellent for macaroni products. Hard wheat contains a type of gluten which, because of its elasticity, is well adapted for bread flour. It is the gluten which forms the meshwork of tiny air spaces in the loaf. Bread flours made wholly from hard wheats are used mostly by commercial bakeries.

Soft wheats are used for the pastry or cake flours which are especially well adapted for cakes and biscuits. This type of flour contains less gluten and more starch than bread flour. Products baked with it are more tender and flaky than those which are made from bread flour.

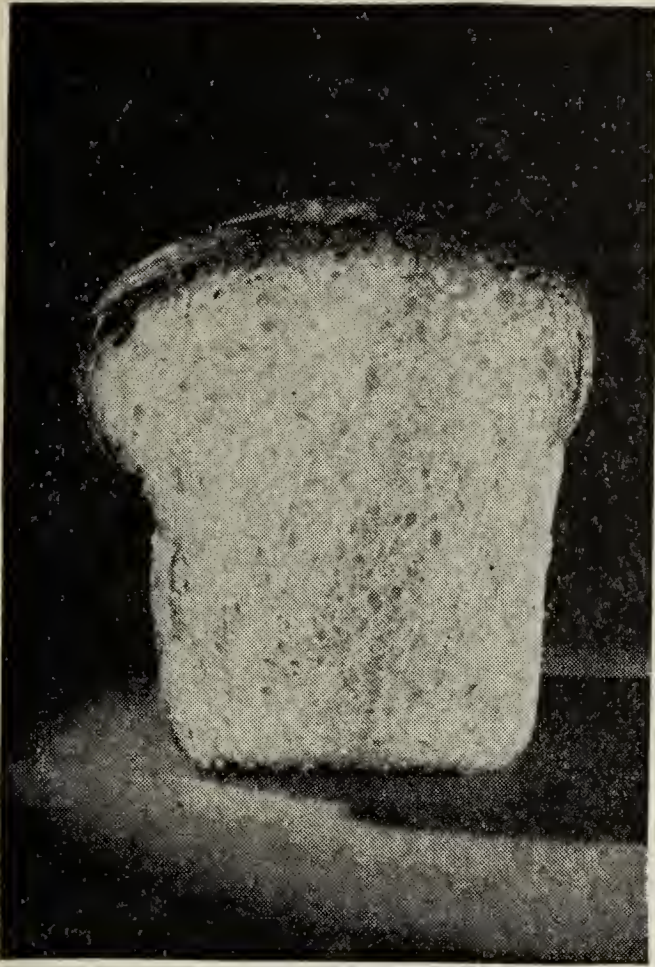
All-purpose or family flour is made by blending bread flour and pastry flour, that is, by using both hard and soft wheats. Some all-purpose flours are made chiefly from hard wheats, and some are made principally from soft wheats. This type of flour is sold for general home use, and most home-baked bread and rolls are made from it. Good cakes can also be made from it, but they are more tender and delicate if made from pastry flour. The strands of gluten in all-purpose flour are more elastic, thicker, and less tender than in pastry flour.

Experiment with gluten. Anyone can demonstrate the way in which gluten helps to make bread or cake by means of a very simple experiment.

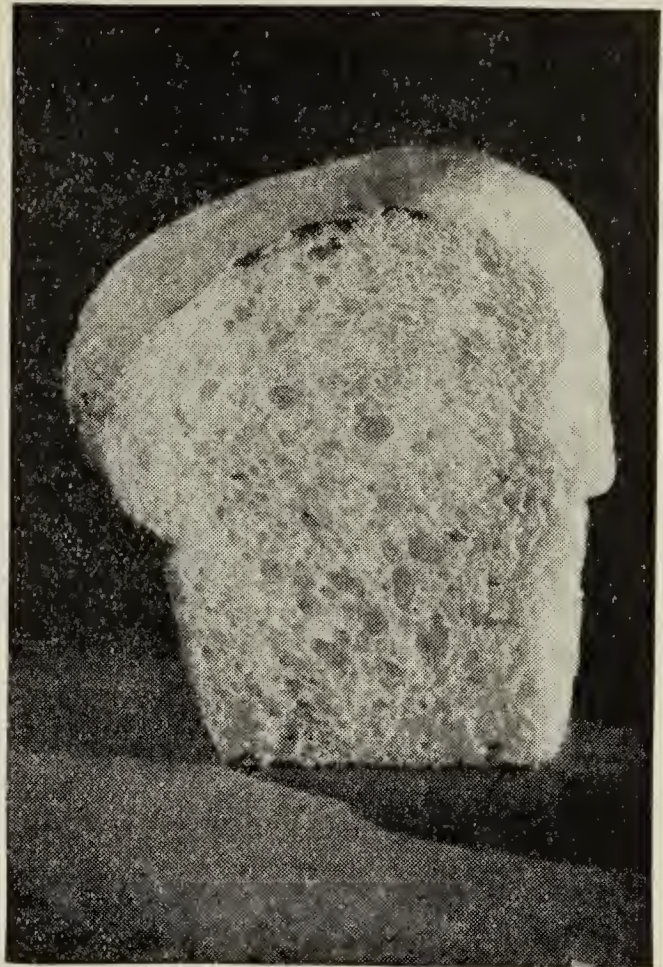
1. Put a cupful of flour into a bowl and add enough water to make a stiff dough.

2. Knead the dough until it is smooth and satiny, which will require about 10 minutes.

3. Wash the dough, kneading it constantly in one bowl of fresh water after another or under running water. This removes the starch;



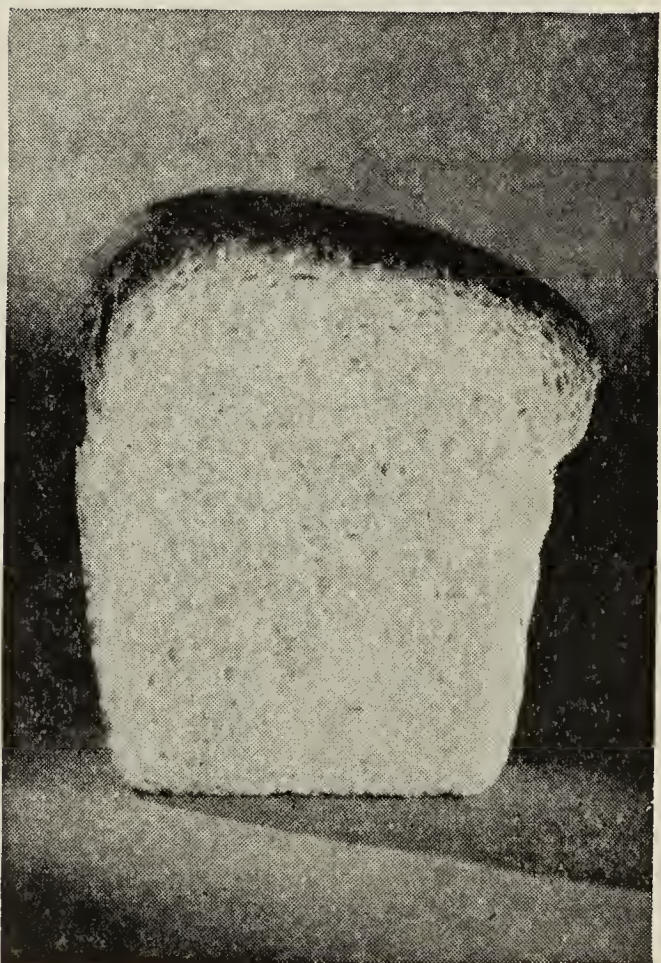
Bread (cut) baked at optimum temperature.



Bread (cut) baked at too low a temperature.

Top left: This bread has a fine, even grain and a thin crust. *Top right:* This bread is coarse and uneven in grain and has a soggy, underdone appearance. *Bottom right:* This bread is compact in texture, and has a thick, overbrowned crust.

Individual pound loaves of bread are baked at 425° F. for the first fifteen minutes of the baking time. Then the oven temperature is reduced to 375° F. and the baking is continued for 30–40 minutes longer.



Robertshaw Thermostat Company

Bread (cut) baked at too hot a temperature.

CLASS PROJECT: BAKE A LOAF OF BREAD, USING THE STRAIGHT DOUGH METHOD.

1. This project will require more than one day of class work, whether your periods are long or short. Plan with your teacher the number of days required for a demonstration of breadmaking and for each group to bake a loaf of bread.

2. Your plan should include the following steps:

- a. A demonstration of mixing the dough.
- b. Practice in kneading dough by members of the class, using the demonstration dough.
- c. The mixing of dough by each group.
- d. Kneading, allowing dough to rise, second kneading and forming loaf, rising, baking, and removing from pans.

3. Serve your bread with butter or fortified margarine and a beverage.

4. Hold a bread clinic and judge your bread according to the standards on pages 157 to 158.

when the water is no longer cloudy, the grayish, elastic gluten remains

4. Put the smooth, moist ball on a baking tin and bake for one hour at 450° F. Steam expands the elastic gluten in the same way that baking powder causes a biscuit or muffin to rise. Then, because the gluten is a protein, the heat causes it to coagulate, or harden, and hold its shape.

Flour is the basis for all breads. The kind and amount of gluten contained in the flour is very important in producing good bread. Gluten which is too strong cannot be stretched sufficiently by the leavening agent to make the bread light. If the gluten is too weak, its strands are broken, allowing the gas to escape and resulting in a small and rather heavy loaf of bread.

Gluten is affected by handling. Remember the gluten when you are making any type of bread. In thin batters, such as that for popovers, the particles of gluten are held apart by the large amount of liquid and cannot easily form in strands or sheets. In order to produce gluten formation, the thin batter is beaten vigorously.

In drop batters used for muffins, the particles of gluten can easily form a strong meshwork. For this reason very little stirring is desirable. If stirred long and hard, the muffins will be tough because the gluten is overdeveloped.

Soft biscuit doughs are kneaded briefly and gently so as to develop the gluten slightly. Too much kneading will result in a tough biscuit.



Wheat Flour Institute

Bread and butter with milk is a good after-school lunch.

Doughs for yeast bread are stirred and kneaded thoroughly for ten minutes or longer so that the gluten will be well developed. The action of the yeast expands the strong gluten meshwork and, at the same time, makes it tender and elastic by the fermentation resulting from the yeast growth.

Yeast acts as a leavening agent. Yeast, which is really a microscopic fungus plant, grows fast when conditions of temperature and moisture are favorable and when a food supply is available. In bread-making, the yeast cells feed upon the sugar and flour, causing fermentation. As the fermentation progresses, bubbles of carbon dioxide gas expand the gluten meshwork of the bread dough. The best temperature for encouraging yeast action is slightly above room temperature, 80° to 85° Fahrenheit. High temperatures kill the yeast plants, and cool temperatures cause them to cease work. These simple facts are important to remember when you are making bread or rolls. Never mix the yeast with hot or boiling water because its leavening power will be ruined by the heat. Yeast should be softened in lukewarm water (about 82° F.). When you leave your pan of rolls to rise, place it in a

CLASS PROJECT: MAKE QUICK PAN ROLLS OR REFRIGERATOR ROLLS AND SERVE WITH BUTTER, MARGARINE, OR FRUIT PRESERVES.

1. The class should study the recipes on pages 159 to 161 and decide whether it will use the quick pan or the refrigerator recipe. Since the timing is quite different, it is advisable for all the groups to use the same recipe.
 2. Watch a demonstration of making the rolls according to the recipe which you have chosen. After reading the suggestions on this page, decide how you will shape your rolls.
 3. Plan a work schedule which will be adaptable for your recipe and can be adjusted for the length of your class periods.
 4. Work carefully and quickly, remembering to "wash up" as you go.
 5. Compare the rolls baked by different groups. Judge them according to the points given on pages 157 to 158.
-

spot where the temperature is right. Too high a temperature or too long a period for rising will cause carbon dioxide bubbles to overstretch the gluten strands, producing a coarse, uneven texture. Extreme pressure may cause some of the strands to break and the bread or rolls to fall, never to rise again!

General procedure in baking yeast breads. There are two general procedures of mixing bread, the straight dough method or short process and the sponge method or long process. The same recipe may be used with either process. The chief difference in the two methods of mixing the doughs is the way in which the flour is added. In the straight dough method all the flour is added at once to the liquid and yeast. In the sponge method only enough flour is added to the liquid mixture to make a stiff batter. This batter is allowed to rise and makes the sponge. Then the remainder of the flour is added.

Bread dough may be allowed to rise only once, or a second time. Two risings give the bread a finer texture, but very good bread or rolls can be made with only one rising.

Variations of bread recipes. Bread has been made in many parts of the world since the earliest days of civilization. The many varieties include hard, flat, unleavened breads, dark breads, quick breads, sweet rolls, and dozens of other types. Certain types of bread have been developed in various countries, such as the tapering loaves of Vienna, the black bread of Russia, the scones of Scotland, and the corn breads of the South. A considerable variety of breads is found in the modern American bakery shop, ranging from white to whole-wheat and rye breads, and from hard rolls to Danish rings and butterscotch rolls.



U. S. D. A. Extension Service

This 4 H Club member is a state winner in bread-making. She cuts the rolls first, and then she removes all the extra pieces at the same time.

Variations of the standard bread recipes are obtained by using whole-wheat, rye, or soy flours. Results are most successful when one of these flours is combined with wheat flour. Other variations with the bread recipe are secured by shaping rolls into different shapes; among these variations are round buns, clover-leaf rolls, butterhorns, Parker House rolls, and crescent rolls. Still other variations include the addition of other ingredients such as sugar, syrups, raisins, nuts, or honey.

Standards for judging yeast breads. The following points are helpful in judging the quality of yeast breads, whether homemade or commercially baked. They apply to loaves of bread and to plain rolls. The evaluation of such products as butterscotch rolls or frosted tea rings naturally requires an adjustment of points.

1. The bread (loaf or rolls) should be symmetrically shaped with well-rounded top.
2. The crust should be evenly browned, slightly darker over the top, and deep golden brown in tone.
3. The bread should be light in weight in relation to its size.
4. The texture inside should be fine-grained, with a crumb which is

neither dry nor doughy. Breads made with whole-wheat or rye flours are never as delicate in texture as bread made with white flour.

5. The color of the bread inside should be even, without streaks or spots. The color will depend upon the ingredients used.

6. The flavor should be well blended with the characteristic flavor of yeast. It should not be sour.

7. Bread should include the nutritive values found in whole grain. It should be made either from whole-grain flour or be enriched.

Recipes for yeast breads

Bread: straight dough method

MAKES 2-3 LOAVES

1 cake compressed or dry granular yeast	1 c. boiling water
$\frac{1}{4}$ c. lukewarm water	1 c. scalded milk
2 T. sugar	6 c. sifted all-purpose flour
$2\frac{1}{2}$ t. salt	$\frac{3}{4}$ T. melted butter or fortified margarine
2 T. shortening	

SCALD	1 c. milk; heat 1 c. water to boiling.
PLACE	2 T. shortening, 2 T. sugar, and $2\frac{1}{2}$ t. salt in a large bowl; add boiling water and scalded milk. Cool to lukewarm.
SIFT	flour and measure 6 c.
DISSOLVE	yeast in $\frac{1}{4}$ c. lukewarm water; then add to the lukewarm mixture with 3 c. flour, and mix thoroughly.
GRADUALLY	add remaining flour, using just enough to prevent sticking. Work the mixture in the bowl to pick up all particles of dough and flour.
TURN	the dough on a well-floured board and knead until the mixture is elastic and smooth. Return the dough to the bowl; cover with a clean tea towel and a pastry board; and let rise until double in bulk.
CUT	down the dough in the bowl with a spatula and turn on a slightly floured board; knead and shape into loaves half the size of bread pans. Place into greased pans; cover and let rise until double in bulk.
BAKE	in a moderately hot oven (400° F.) for 15 minutes; reduce heat to 375° F. and continue baking 30 to 40 minutes. Bread will shrink from the sides of the pan when done.
BRUSH	top crust of bread with melted butter when the bread is removed from oven.

Bread variations

WHEAT BREAD

Use 3 c. white flour, 3 c. entire wheat flour, and 3 T. molasses instead of sugar.

ROLLED OATS BREAD

Use 1 c. rolled oats, 5 c. white flour, and $\frac{1}{3}$ c. molasses instead of sugar.

BRAN BREAD

Use 1 c. bran, 5 c. white flour, and $\frac{1}{4}$ c. molasses instead of sugar.

Refrigerator rolls

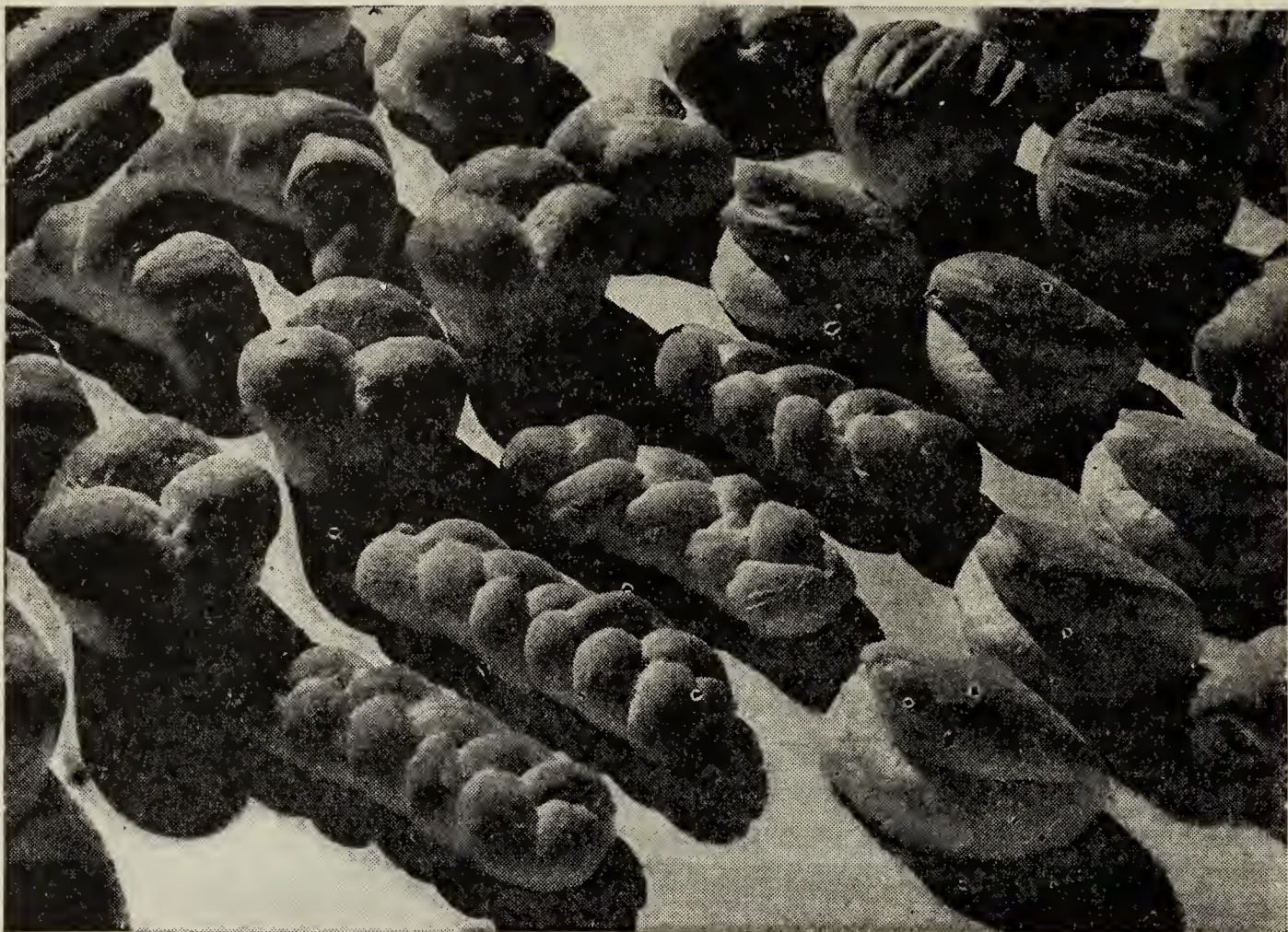
MAKES 3 TO 4 DOZEN ROLLS

- | | |
|--|--|
| 2 cakes compressed or dry granular yeast or $1\frac{1}{2}$ packages of fast granular yeast | 1 T. salt
$\frac{1}{4}$ c. melted shortening, cooled
2 eggs, well beaten
2 c. scalded milk
8 c. sifted all-purpose flour |
| 1 t. sugar | |
| $\frac{1}{4}$ c. lukewarm water | |
| $\frac{1}{3}$ c. sugar | |
- SCALD 2 c. milk; add $\frac{1}{3}$ c. sugar and 1 T. salt; cool to lukewarm.
- SOFTEN yeast and 1 t. sugar in $\frac{1}{4}$ c. lukewarm water; soak for 5 minutes.
- SIFT flour, measure 8 c.
- MELT $\frac{1}{4}$ c. shortening and cool. Beat 2 eggs well.
- ADD softened yeast to 2 c. cooled scalded milk; add beaten eggs and half the sifted flour.
- BEAT in melted shortening; add most of the remaining flour, and beat until smooth.
- TURN on to a floured board, and knead until the dough is no longer sticky.
- PLACE dough in a well-greased bowl; brush the top with a little melted butter or fortified margarine, and cover tightly. Place in the refrigerator to chill.
- KNEAD the dough for a few minutes on a slightly floured board, then shape into rolls; place the rolls on greased pans, cover with a clean tea towel, and let rise in a warm place until double their bulk (about $1\frac{1}{2}$ hours).
- BAKE in a hot oven (425° F.) from 15 to 25 minutes.

Roll variations

BOWKNOTS

- ROLL a small amount of dough to $\frac{1}{2}$ inch thickness and cut in pieces about 6 inches long and $\frac{1}{2}$ inch wide.



Ann Pillsbury, Pillsbury Mills, Inc.

- TIE** in knots and place on a greased baking sheet.
COVER with a clean tea towel and let rise until double their bulk.
BAKE in a moderate oven (375° F.) for 20 to 25 minutes.

BUTTERHORNS

- ROLL** a small amount of dough into a circular shape about $\frac{1}{4}$ inch thick and cut in pie-shaped pieces.
BRUSH with melted butter or fortified margarine.
ROLL up, beginning at the wide ends, and place on a greased baking sheet.
COVER with a clean tea towel and let rise until double their bulk.
BAKE in a moderate oven (375° F.) for 20 to 30 minutes.

ROSETTES

- FOLLOW** directions for "Bowknots."
AFTER tying the bowknot, bring one end through the center and the other over the side; place on a greased baking sheet.
COVER with a clean tea towel and let rise until double their bulk.
BAKE in a moderate oven (375° F.) for 20 to 30 minutes.

BUTTERFLIES

- ROLL** a small amount of dough into a rectangular shape, 6 inches wide and $\frac{1}{4}$ inch thick.

- BRUSH with melted butter or fortified margarine and roll up jelly-roll fashion.
- CUT into pieces 2 inches long and press across the center of each piece with the handle of a knife; place on a greased baking sheet.
- COVER with a clean tea towel and let rise until double their bulk.
- BAKE in a moderate oven (375° F.) for 20 to 30 minutes.

FAN TANS

- ROLL a small amount of dough into a thin rectangular shape.
- BRUSH with melted butter or fortified margarine and cut into strips 1 inch wide.
- PILE 6 or 7 strips together; cut pieces 1½ inches long, and place on end in greased muffin pans.
- COVER with a clean tea towel and let rise until double their bulk.
- BAKE in a moderate oven (375° F.) for 20 to 30 minutes.

Quick pan rolls

MAKES 24 ROLLS

- | | |
|--|---|
| 2 cakes of compressed yeast or 2 packages of fast granular yeast
1 T. sugar
1 c. lukewarm water
2 t. salt | ½ T. melted butter or fortified margarine
⅓ c. melted shortening
1 egg, well beaten
3½ c. sifted all-purpose flour |
|--|---|
-
- SCALD 1 c. water; add ⅓ c. shortening, 2 t. salt, and 1 T. sugar; cool to lukewarm; then add 2 cakes of yeast, broken into small pieces.
 - BEAT egg well and add to the yeast mixture.
 - SIFT flour; measure 3½ c., and gradually mix dough until well blended and soft.
 - TURN on a well-floured board and roll to ½ inch in thickness.
 - PLACE in a greased pan 12 x 8 inches.
 - CUT dough across the pan in 1-inch strips, and then cut through the center.
 - BRUSH the cut strips with melted butter or fortified margarine.
 - COVER with a clean tea towel and let rise in a warm place (80° to 85° F.) for 30 minutes.
 - BAKE in a hot oven (425° F.) for 20 minutes.

CLASS ACTIVITIES

1. How do you select a loaf of bread from the display rack in the store? Do you choose a brand which is prominently advertised on the radio? Because you like its flavor? Because it is enriched? Or for another reason? Compare your buying habits. What should be your basis for selection?

2. Discuss breads which are commonly used by different nations. If possible, arrange an exhibition when members of the class will bring different types of bread such as Italian bread, Russian bread, Danish bread, Swedish rye krisp, Norwegian flat bread, French bread, and Jewish matzoth. Perhaps this exhibition can be concluded by a "tasting" party.

3. When you are selecting a loaf of bread from the display rack in a store and there are five different brands of bread on the rack, each loaf costing 12 cents, how can you tell when you are getting the best value for your money? The size of a loaf is not a good guide because one loaf may be lighter and bigger, yet weigh less than a smaller loaf. Conduct a survey of the breads sold in your stores. Determine which breads are the better values by comparing the prices, the weight of each loaf, and the food value of each loaf (is the bread made of enriched flour, whole-grain flour, or unenriched flour?).

4. Make variations of the yeast bread recipe by adding other ingredients such as sugar and raisins.

5. Hold a breadbaking contest in which the entries are baked at home. Award a blue ribbon for the best bread, a red ribbon for the second best, and a yellow ribbon for the third best.

6. If possible, visit a neighborhood bakery to see how bread is baked commercially.

FUN WITH FOOD AT HOME

1. Surprise your family with yeast rolls of a kind with which they are not familiar.

2. Add three recipes for yeast rolls to your collection of recipes.

3. Conduct a "tasting and testing" experiment with your family. Serve them a different brand of baker's bread each night for five nights. Ask them to judge each brand according to the points given on pages 157 to 158.

6. *The nutritional values in cereals*

The cereal group of foods holds an extremely important place in the diet of people all over the world. Bread, macaroni, and other grain products constitute a large and vital portion of the average American diet. Food manufacturers have succeeded in producing a variety of forms of food from the grain products, and homemakers have learned to use them in many appetizing dishes. However, our interest in tasty and satisfying food should not lead us to ignore its healthful aspects. It is not enough to know how to prepare a delicious breakfast cereal, a hot bread, or a rice pudding. We should know what food values each dish contains and its place in our own daily food requirements.

Nature's great gift: the grain foods. Since the earliest days of civilization, and even in prehistoric times, man has eaten the seeds of grain plants. In the beginning, he probably mashed them into a pulp and ate them raw; but as the centuries rolled by, he gradually learned how to make flour and bread. Our modern mills now produce hundreds of cereal foods: raw, semiprepared, and ready-to-eat. Unfortunately, men did not realize that nature's great gift of cereal food was most valuable to us when it was used as provided—as whole grain. Flours and other products have been refined until they are robbed of their great treasures, their mineral and vitamin content. Now that the scientists have learned how important these nutrients are to us, we are learning to use whole-grain foods. Because many people have acquired a determined preference for white breads and other refined cereals, manufacturers are enriching these products by adding iron and B vitamins. This attempt to provide grain foods with all their natural nutrients is tremendously important to the nation's health and to us personally.

Why is enrichment of grain products important? The relation of iron and the B vitamins to health should be clearly understood by everyone. A brief summary of the extra nutritional values in enriched or whole-grain cereals is given below.

- Iron:* Essential in the formation of new red blood cells and in carrying oxygen to all the tissues of the body.
Helps to prevent anemia.
One of the building materials present in all cells.
Helps greatly in maintaining vigor and general health.
- Thiamin:* Helps to keep nerves, heart, and digestion in good condition.
Necessary for normal growth.
Helps to prevent fatigue.
Prevents beriberi, a serious disease.
- Riboflavin:* Necessary for normal growth.
Helps to prevent digestive and intestinal disorders.
Necessary for healthy skin, eyes, and mouth.
- Niacin:* Helps to keep the skin clear.
Protects the nerves and the digestive tract.
Prevents pellagra.

This list of protective health values contained in whole-grain or enriched cereals is impressive. It hardly seems possible that such small parts of a grain kernel, the germ and the bran layers, could contain

such vitally important nutrients. These values are well hidden, but now that modern scientists have discovered them, we can take advantage of nature's gift to us, the whole-grain or enriched cereal food.

Laws requiring enrichment of grain foods. Many mills now voluntarily enrich their cereal products with iron and B vitamins whether required by law or not. During World War II the War Food Administration ordered the enrichment of all kinds of white bread, rolls, and buns made from breadlike dough that were not coated or filled. Since that time 18 states have passed laws requiring enrichment of all white bread and white flour sold within their borders.

Some Southern states now have laws requiring that degerminated corn products be enriched. It has been determined that the disease, pellagra, can be prevented by niacin, one of the B vitamins, and that therefore the enrichment of corn products can help to prevent pellagra. This disease causes a great deal of sickness and hundreds of deaths annually, for corn meal and grits are the staple foods of the South, and these products, which are made only from endosperm, are lacking in B vitamins. Many millers in the South now enrich their corn products voluntarily, although not required to do so by law.

Fuel values in grain foods. Fuel is supplied to the body in the form of carbohydrates, proteins, and fat. All three of these nutrients are found in the grain foods, but carbohydrates occur in the largest amounts. The diagram of the wheat kernel, on page 112, shows that the white center or endosperm is composed chiefly of carbohydrate and protein. Nutrition experts estimate that approximately 60 per cent of our calorie intake should be carbohydrate. The cereal foods consisting chiefly of starch, a form of carbohydrate, are rich in fuel supply. Bread, breakfast foods, main dishes, and desserts made from grain products contribute substantially to our calorie requirements. Young people who are still growing, athletes, and all who lead an active life need larger amounts of the starchy foods than those who lead sedentary lives.

The fat content in grain foods is found in the germ. See the diagram on page 112. If this portion of the kernel is removed by the milling process, the fat content is also lost. Wheat-germ cereal is a very good fuel food because of its fat content, and also because of its carbohydrate and protein content. It is a preferred cereal for the feeding of babies.

The protein content in the cereal foods is important. Study of the diagram on page 112 shows that both the endosperm and germ contain protein.

Proteins are made up of 23 amino [ă-mē'nō or ăm'ī-nō] acids. Some of these can be manufactured in the body and others cannot. The ten

amino acids which cannot be produced in the body are called essential acids. These ten acids must be obtained in food, because without them we cannot live. Our need for protein in the diet is really a need for the ten essential amino acids.

Some foods contain all these acids and other foods contain only some of these acids. A protein which contains all the ten acids is called a *complete protein*. A protein which lacks some of the ten acids is called an *incomplete protein*. Proteins of milk, eggs, and meat (which we shall study later) are complete proteins. The proteins found in most cereal foods are lacking in some of the essential amino acids and are, therefore, incomplete proteins. The proteins in wheat germ, soybeans, and peanuts are complete.

Incomplete protein foods combined with other foods containing protein make a valuable addition to the diet. Breakfast food eaten with milk, macaroni and cheese, or spaghetti and meat are highly desirable combinations.

Your eating habits. Our knowledge of proteins, carbohydrates, and vitamins in cereal foods is of no practical value unless we form good eating habits in relation to this type of food. Nutritionists suggest the following:

1. Eat bread in some form at every meal. In addition, eat one or two servings of other cereal foods every day.
2. Choose the whole-grain or enriched cereals for their iron and vitamin content. Iron is generally lacking in the average diet unless special care is taken to eat foods which are good sources for it.
3. Do not depend on the cereals as your only source of proteins. Combine them with other protein foods, such as milk, eggs, cheese, and meat.

CLASS ACTIVITIES

1. What food values would you receive from a lunch consisting of tomato juice, a peanut butter sandwich, milk and a banana?
2. Suppose that your diet included very little carbohydrate and great deal of protein which was used for energy. Why would this be an expensive diet?
3. Mention at least seven grain products which are now or may soon be enriched.

A SUMMARY OF YOUR STUDY OF THE CEREAL FOODS

This unit of work has included many activities in food preparation and many facts to learn about the cereal foods. Are your ideas well organized and clear-cut?

Nutrition

Food values in whole-grain cereals
Enriched white flour
Enriched breakfast foods
Enriched corn products
Fuel value in macaroni products
"Converted" rice

Points on buying and caring for cereals

Reading the labels
Costs of breakfast foods
Value of advertisements
Semiprepared mixes
Bread flour, all-purpose flour, and
cake flour
Weevils
Storage of cereals

Skills in food preparation

Light breakfast with ready-to-eat
cereal
Breakfast with cooked cereal
Baking powder biscuits
Muffins
Griddle cakes and waffles
French toast and sautéed mush
Noodle ring, macaroni dish, and rice
dish
Bread by the straight dough method
Hot rolls and variations

WHAT DO YOU KNOW ABOUT THE CEREAL FOODS?

The following quiz questions will help you to check your knowledge and understanding of the cereal foods, including their general characteristics, their preparation in various dishes, and their nutritive values.

A test on quick breads and yeast breads

Each of the terms given below refers either to quick breads or to yeast breads. On a separate sheet of paper write the number of each term and the word "yeast" or "quick" after it. **Do not write in this book.**

- | | |
|--------------------|-------------------|
| 1. Two risings | 6. Double in bulk |
| 2. Johnnycake | 7. Baking powder |
| 3. Long kneading | 8. Flaky texture |
| 4. Delicate gluten | 9. Semiprepared |
| 5. Drop batter | 10. Strong gluten |

A test on nutritive values

Some of the following statements are true and some are false. On a separate sheet of paper write the number of each statement and the word "true" or "false" after it. **Do not write in this book.**

1. The cereal foods are a very important source of energy.
2. Iron is important to the body because it helps to keep the blood in good condition.

3. Thiamin is a mineral which helps to prevent anemia.
4. Breakfast food made only from bran is an excellent source of energy.
5. Niacin, thiamin, and riboflavin generally are found together in the same foods.
6. Whole-grain foods are a good source of the vitamin B complex.
7. The proteins in corn products are complete proteins.
8. Enriched flour contains iron and B vitamins.
9. Brown rice is entirely lacking in vitamin content.
10. The grain foods are excellent high-energy, low-cost foods.

The story of a wheat kernel

This is a completion test in which you are to supply the missing words. If you understand the fundamental processes in the manufacture of flours, you will be able to fill in the sentences correctly. On a separate sheet of paper write the numbers from 1 to 12, and opposite the numbers write the 12 missing words. **Do not write in this book.**

I grew on a stalk of hard wheat in Minnesota. When I was ripe, I was sent to a flour mill along with millions and trillions of my companions in the big wheat field. At the mill I was robbed of my _____ covering and my _____. The same thing happened to all my companions. We were ground up to make _____ flour. The color of this flour was _____. Next, the manager said that our flour could not be sold in some states unless it was _____, so _____ and _____ were added to the flour, although it did not look any different after the addition had been made. Next, we were sent to a bakery where we were tested for _____. The test showed that the _____ content was _____ and _____, which meant that the flour would make good yeast bread. After the loaves were baked, each one was packaged in a _____ wrapper and sent to the retail stores.

A test on recipes for cereal foods

Can you identify the type of recipe from the directions in the first column on the next page? Each direction in the first column refers to one of the products listed in the second column. On a separate sheet of paper write the number of each direction, and opposite the number write the correct answer. **Do not write in this book.**

- | | |
|--|------------------|
| 1. Cool liquid to lukewarm. | Waffles |
| 2. Cut shortening in with pastry blender. | Breakfast cereal |
| 3. Finish cooking in top of double boiler. | Yeast rolls |
| 4. Separate egg whites and egg yolks. | Biscuits |
| 5. Boil free in large amount of water. | Rice |

REFERENCES FOR FURTHER READING

- Amidon, E. P., Bradbury, D. E., and Drenckhahn, V. V., *Good Food and Nutrition*. John Wiley and Sons, Inc., 1946. Pp. 8-22.
- De Gouy, Louis P., *The Bread Tray*. Greenberg, 1944.
- Harris, J. W., and Speer, E. L., *Everyday Foods*. Houghton Mifflin Company, 1946 and 1941. Pp. 67-68, 80-87, 398-415, 452-459.
- Silver, Fern, *Foods and Nutrition*. D. Appleton-Century Company, Inc., 1941. Pp. 11-30, 47-51, 69-79.
- Sumption, L. L., and Ashbrook, M. L., *Breads and More Breads*. The Manual Arts Press, 1941.
- Trilling, Mabel B., and Nicholas, Florence W., *You and Your Money*. J. B. Lippincott Company, 1944. Pp. 112-129.

4

Milk: The Almost Perfect Food

Milk is more important to you than any other single food because it contains almost all of the essential nutrients. It is hard to believe that a substance which is thin and pours with the consistency of water contains such an amazing amount of food value. There is, indeed, a very large percentage of water in milk, but the remaining solids are packed with nutritive treasures. Remember that cheese and butter are among the foods made from milk, and these, too, are high in food values.

Milk and milk products, with the exception of butter, constitute Group Four in the Basic 7 Food Groups. Butter and margarine form a separate group.

Since milk is such an important food, it is lucky that there are many ways of including it in the diet. Besides plain milk, which is a very popular beverage, there are many other milk drinks, such as milk shakes, cocoa, and eggnogs. Numerous luscious desserts require milk as the chief ingredient. Ice cream tops the list as the favorite milk dessert. Cream soups, which we learned about in connection with hearty vegetables, require milk as a basic ingredient. Creamed or scalloped vegetables or meats, soufflés, and other dishes require milk. Those who do not like to drink milk can easily obtain their daily quota by eating it in soups, main dishes, or desserts.

Our study of milk in this unit includes an important milk product, cheese. This highly concentrated food contains a much higher content of food nutrients per ounce than does fluid milk. It is important to know how cheese can be used to make appetizing dishes which will contribute essential nutrients to the diet and the difference in nutritive values of cheese made from skim milk and that made from whole milk.

1. Why is milk the most important of all foods?

Milk is the most important of any single food because it contains most of the nutrients essential to health and to life itself. All of the nutritional values present in milk are also found in other foods, but no food contains so many elements vital to good nutrition in such abundant quantities. Besides this, milk is good tasting and can be adapted to many types of dishes.

Carbohydrates in milk. The carbohydrate content in milk is not starchy like that in hearty vegetables or cereals, but consists of a sugar called lactose. This milk sugar serves in the same way as starch when taken into the body. It is burned or transformed into energy and helps to maintain the body temperature. Lactose is the least sweet of the sugars and does not ferment easily. It is easily digested and adds to the rich, mild flavor of milk.

Remember that everyone needs energy food throughout life, and that young people who are still growing need an extra amount.

Proteins in milk. Milk is an important protein food because it contains all the amino acids in generous quantity. The milk proteins promote growth of new muscle tissues and repair worn-out tissues most effectively. They also help to build hemoglobin for new red blood cells and other special substances in the body. Everyone needs these building elements. The need is greatest for those who are still growing and for those who are recovering from wasting diseases, when tissues need to be built up, but everyone needs protein throughout life.

The human body should have from two to three ounces of protein daily. One quart of milk contains approximately one ounce of complete protein, so four glasses of milk everyday can provide a large portion of this essential nutrient. Milk proteins are the most easily digested of all proteins.

Milk fat is valuable for energy and vitamin A. Whole milk usually contains 3.25 to 4 per cent of milk fat or butterfat. It is easily digested and important for its energy value. All fats are highly concentrated sources of energy. For example, two teaspoons of butter may equal one slice of bread, and two tablespoons of heavy cream are equal to one large banana in calories. It is surprising to learn that butter spread thickly upon your bread can give you as much or more energy than the slice of bread itself; or that a very little cream on your cereal is equal to the sliced banana on top of it.

The most important food value in butterfat is vitamin A. This nutrient is essential for normal growth and should be included in the diet of children and young people who are still growing. Normal development is impossible without vitamin A. It is also needed throughout life, as a lack of it will cause general weakening, fatigue, low resistance, and poor vision.

A deficiency in vitamin A causes night blindness and eventually affects the day vision. Night blindness means that one has difficulty in seeing in a dim light. If you have only a slight deficiency in vitamin A, you probably will not realize that anything is wrong with your night vision. If you drive a car, you will not realize that you do not see road signs and pedestrians as quickly and clearly as you should. When the vitamin A deficiency becomes greater, you will have still more difficulty in seeing at night and even then may assume that your vision is normal. Tests given to drivers who have had accidents in night driving show that nearly all of them suffered from a vitamin A deficiency. Broken bones, disfiguring scars, and death are a high price to pay for the lack of vitamin A in the diet!

A deficiency in vitamin A may also cause rough skin, dry, lusterless hair, and nails which break easily. Low resistance to infections of the ears, sinuses, eyes, and nose also result from a lack of vitamin A.

Fresh, whole milk and the products made from milk fat—butter and cream cheese—are excellent sources of vitamin A. It should be remembered, however, that the amount of vitamin A in milk depends upon the kind of feed which the cows have had. Dry feed in winter produces much less vitamin A than fresh, green feed in summer.

The B vitamins in milk. Since we are already familiar with the B vitamins—thiamin, riboflavin, and niacin—in connection with our study of the nutrients in whole-grain foods, it is not necessary to explain again their importance to health. See page 163.

Milk contains considerable quantities of these vitamins, especially riboflavin. A quart of milk each day will give you 82 per cent of all the riboflavin which you need. In order to get the same amount of riboflavin contained in a quart of milk, you would have to eat 39 eggs or 12 cups of raw cabbage or 63 cups of baked beans!

Vitamin C in milk. Raw milk is only a fair source of ascorbic acid, and much of it is lost during the process of pasteurization. Since other foods—the citrus fruits, tomatoes, and greens—supply this vitamin in abundant quantities, it is not necessary to depend upon milk for this nutrient.



U. S. D. A. Extension Service

These 4 H Club members are demonstrating the preparation of a chocolate milk drink.

Vitamin D in milk. This vitamin, sometimes called the sunshine vitamin, is vitally important for the prevention of rickets in babies and the softening of bones in adults, for the prevention of tooth decay, for the development of strong bones and teeth, and for normal growth. Vitamin D may be called the sunshine vitamin because adequate exposure to sunlight or the ultraviolet rays of a sun lamp can provide the body with this nutrient. Not many foods naturally contain vitamin D, but it can be added to other foods by the process of irradiation. Therefore, this type of milk is also known as

irradiated milk. Do you drink irradiated or vitamin D milk?

Milk can be enriched with vitamin D in several ways. The milk may be exposed to ultraviolet rays, or a vitamin D preparation, called irradiated viosterol, may be added to the milk. Enriched milk is also produced by giving the cows feed which contains vitamin D.

The importance of the vitamin D milk cannot be overemphasized. Since very few foods contain this nutrient, and since it is difficult to obtain a year-round supply of it by exposure to sunlight, vitamin D milk is a valuable and dependable source. The small extra cost for a quart of enriched milk will be far less expensive than dental bills and doctors' prescriptions for vitamin pills.

Calcium and other minerals in milk. Calcium (lime) and phosphorous are essential nutrients for good bones and teeth. Milk is richer in calcium than any other food. You would have to eat approximately 10 eggs, 6 pounds of potatoes, or 42 slices of bread in order to get as much calcium as you can obtain from one 8-ounce glass of whole milk! Milk is also a very good source of phosphorous, which is needed throughout life for strong bones and teeth and for good cell structure.

Iron and other minerals are not abundant in milk. This shortage of minerals and of vitamin C prevents milk from claiming the title of the completely perfect food.

Your own milk requirements. Because milk contains such a wealth of essential nutrients, it rates first place among the everyday foods. Nu-

tritionists recommend 3 to 4 cups daily for a child or teen-ager, 2 cups daily for an adult, 4 cups daily for an expectant mother, and 6 cups daily for a nursing mother.

Many young people, who have learned to like milk, far exceed their daily quota. Young men who served in the armed forces during World War II, when asked what food they missed most keenly, almost always replied, "Fresh milk." Undoubtedly, their milk-drinking habit, formed during their growing period, was largely responsible for the fact that their average weight and height was greater than that for the young men who fought in World War I.

CLASS ACTIVITIES

1. How much milk is drunk daily by members of the class? Compute the amount in gallons for the whole class. What is the average amount taken by any one girl? The greatest amount? Do you consider the milk-drinking habits of the class good or poor? Why?
2. Estimate the daily amount of milk eaten in foods (not beverages) by members of the class. List the dishes commonly included in the diet which require substantial amounts of milk.
3. If you should drink only skimmed milk and eat no butter in order to reduce your weight, what nutrient would probably be lacking in your diet? What difficulties might you expect because of this deficiency?
4. Where can vitamin D milk be obtained in your community? How much does it cost in relation to ordinary pasteurized milk? How much difference would it make in your family milk bill?
5. Many people are nervous and have disagreeable personalities because of a deficiency of calcium. How could such a person learn to like the taste of milk? Is a finicky appetite or health building more important?

2. Milk drinks: plain and fancy

The popularity of milk drinks is proved by the demand for beverages in which milk is the basic ingredient. Dairy bars are well patronized and owe much of their success to their milk shakes. Plain milk and hot cocoa are standard drinks served with meals for millions of people. There are many other delightful milk drinks which have great appetite appeal. All of them are simple to prepare, and everyone should become familiar with the possibilities for "dressing up" plain milk.

Chocolate milk drinks. Chocolate flavor combines excellently with milk and is popular with many milk drinkers. Hot cocoa or chocolate, chocolate milk shakes, and cold chocolate milk are standard beverages

CLASS PROJECT: A MILK DRINK SERVED WITH TOAST STICKS OR SANDWICHES.

Prepare and serve a milk drink with a bread accompaniment.

1. Each group should choose a different milk drink; the recipes for eggnogs, molasses milk, "Apricot Flip," chocolate milk shakes, and others are on pages 175 to 177.
 2. Choose a drink which is new to you, and study the recipe for it.
 3. Serve the drink and bread accompaniment in buffet style as shown in the illustration on the opposite page.
 4. Arrange for tasting the different kinds of milk drinks. Which ones do you like best? Why?
 5. What food value is added to the milk by the flavoring in your favorite milk drink?
-

both at home and in dairy bars, cafeterias, and restaurants. Other variations are obtained by adding malt or mint. Chocolate malted milk and chocolate mint flip are pleasant variations.

Chocolate and cocoa add food value to these beverages. Both are made from the cocoa bean, and their difference is in their fat content. Chocolate is about 50 per cent fat, but cocoa contains only about 22 per cent fat. Consequently, chocolate is much richer than cocoa and provides a higher energy value. However, cocoa is considered better adapted for children or people with digestions that are easily upset.

When cocoa or chocolate is used frequently for beverages, it is convenient and timesaving to make a quantity of cocoa paste or syrup which can be mixed with the milk quickly when needed. All that is necessary for a cold drink is to mix the paste and the milk; all that is necessary for a hot drink is to heat the mixture.

Chocolate milk drinks should be made from whole milk if the maximum nourishment is to be obtained. Often, commercially prepared chocolate drinks are made from skim milk.

Eggnogs are tasty and nourishing. Eggnogs are made by adding eggs and some other ingredient for flavoring to the milk. Pineapple, orange juice, vanilla, or ginger ale are good in eggnog. These drinks are more appealing to the eye and to the taste when the egg whites and yolks are separated, beaten well, and added to the milk separately. The fluffy egg whites should be folded in carefully, leaving a fluffy mound on top of the drink as shown in the picture on the opposite page.

Since egg yolks are rich in iron, the food value of the eggnog milk drink is enriched in a nutrient in which milk is deficient.



Poultry and Egg National Board

Eggnogs and toast sticks with jam make a good between-meal snack.

Other milk drinks. A very appetizing drink can be made by adding a tablespoon of molasses to each cup of milk, and beating. Since molasses is a very rich source of iron, this drink can really be considered as enriched milk.

Fruit juices can be used for flavoring in milk drinks. Mashed bananas, orange juice, and sirup beaten into the milk makes a delicious concoction called "Banana Fluff." Prune milk shake is made by using ice cream and prune juice with the milk, and grape shake is made with grape juice. In each case a new food value is added to the milk drink, and although the amounts may be small, they contribute to the total nourishment received from the milk drink.

Recipes for milk drinks

CHOCOLATE SIRUP FOR MILK DRINKS

5 squares unsweetened chocolate	$\frac{1}{4}$ c. light corn sirup
$1\frac{3}{4}$ c. sugar	$\frac{1}{2}$ t. salt
2 c. boiling water	

- CUT 5 squares chocolate in small pieces and place in the top of double boiler; melt over hot water.
- ADD 2 c. boiling water; remove from fire and cook over direct heat for 2 minutes, stirring constantly until smooth and thick.
- ADD $\frac{1}{4}$ c. sirup, $\frac{1}{2}$ t. salt, and $1\frac{3}{4}$ c. sugar; heat, and continue to cook for 4 minutes. Stir; remove from heat and cool. This should measure $2\frac{1}{4}$ cups. If not, add enough boiling water to make that amount.
- STORE in a covered glass jar in the refrigerator for future use.
- NOTE: Use 1 T. chocolate sirup to 1 cup milk. If a stronger chocolate flavor is desired, add more sirup.

EGGNOG

SERVES 1

- | | |
|----------------------------------|--------------------------|
| 1 egg yolk, beaten well | 1 c. cold milk |
| 1 egg white, beaten almost stiff | $\frac{1}{2}$ t. vanilla |
| 2 t. sugar | F. G. salt |
| F. G. nutmeg | |

- BEAT egg white until almost stiff; then beat egg yolk until thick; add 2 t. sugar and F. G. salt. Beat. Add 1 c. milk and $\frac{1}{2}$ t. vanilla. Beat.
- FOLD in egg white and pour into glass. Top with a F. G. nutmeg.

HOT CHOCOLATE

SERVES 5

- | | |
|---------------------------------|--------------------------|
| 2 squares unsweetened chocolate | $\frac{1}{3}$ c. sugar |
| $1\frac{1}{4}$ c. boiling water | $\frac{1}{8}$ t. salt |
| 4 c. scalded milk | $\frac{1}{2}$ t. vanilla |

- CUT 2 squares chocolate in small pieces and place in the top of a double boiler; melt over hot water.
- SCALD 4 c. milk.
- ADD $1\frac{1}{4}$ c. boiling water to chocolate and cook for 5 minutes, stirring occasionally.
- ADD $\frac{1}{3}$ c. sugar, $\frac{1}{8}$ t. salt, and scalded milk. Stir and cook for 5 minutes. Add $\frac{1}{2}$ t. vanilla and beat vigorously with egg beater.
- SERVE hot, topped with a marshmallow, cream, or whipped cream.

MALTED MILK

SERVES 1

- | | |
|--------------------------|--------------------------------------|
| 1 T. malted milk powder | $1\frac{1}{2}$ T. chocolate sirup or |
| 1 c. cold milk | 1 T. molasses |
| $\frac{1}{8}$ t. vanilla | |

MAKE a paste with 1 T. malted milk and $1\frac{1}{2}$ T. chocolate sirup or 1 T. molasses; add 1 c. cold milk and $\frac{1}{8}$ t. vanilla. Beat vigorously. Pour into a glass and serve at once.

NOTE: One or two tablespoons of chocolate ice cream may be added.

CHOCOLATE MILK SHAKE

SERVES 1

$1\frac{1}{2}$ T. chocolate sirup 1 c. cold milk

BEAT or shake in a jar 1 c. milk and $1\frac{1}{2}$ T. sirup. Pour into a glass and serve at once.

NOTE: One or two tablespoons of chocolate or vanilla ice cream may be added either before or after making.

APRICOT FLIP

SERVES 4

$\frac{1}{2}$ c. strained apricots 1 c. vanilla ice cream ($\frac{1}{2}$ pint)
1 T. lemon juice 3 c. ginger ale

MIX $\frac{1}{2}$ c. apricots and 1 T. lemon juice together; divide in four tall glasses.
ADD 4 T. ice cream to each glass; pour on ginger ale, stir, and add more ginger ale. Serve immediately.

CLASS ACTIVITIES

1. How many girls in the class have learned to like a new milk drink? Which variety of milk drink is most popular in your class? What food values are found in this drink?

2. If you were put on a diet which permitted only skimmed milk or buttermilk, what would probably be wrong with your figure?

3. If you were anemic, which milk drinks would be best for you?

4. Plan a dairy bar for refreshments at a school party. Arrange to have at least five different kinds of milk drinks which may be ordered.

FUN WITH FOOD AT HOME

1. Serve a new milk drink to your family with a bread accompaniment for a bedtime lunch. Keep the drink a surprise. Report on the popularity of the drink.

2. Add recipes for five different kinds of milk drinks to your collection of recipes.

3. Milk desserts: good to eat and good for you

Delicious and nutritious! What more could we ask for the finish of a meal? Desserts using milk as the chief ingredient are equally pleasing to the eye and to the tongue. Soft and baked custards, cornstarch, rice, tapioca puddings, ice creams, and sherbets offer a delightful array of tasty desserts. Possibilities for variations of the basic recipes for each of these types is almost unlimited.

Milk desserts for the whole family. Milk desserts are especially well adapted for families with members of widely varying ages or for people whose digestions are delicate. A baked custard is equally good for the two-year-old, the semi-invalid, and the husky adult. Ice cream may be served occasionally to the toddler, to those on restricted diets, to the most active adolescents, and to their elders. Quite possibly the young people and adults may like to have their custards and ice creams "dressed up" with chocolate sauce, nuts, or other de luxe features. However, the preparation of milk and ice cream desserts for a family group including widely varying ages is not difficult. All the foundation dishes are made in one operation, and the extra sauces or other ingredients are

CLASS PROJECT: BAKED OR SOFT CUSTARD. LEARN TO MAKE PERFECT CUSTARD.

1. Study the recipes for baked and soft custard on pages 188 and 189, and read the general discussion of making custards in this unit.

2. Watch a demonstration of making both soft and baked custard. Make notes on the steps required.

3. Since the same mixture is used for both soft and baked custard, each group should prepare both kinds in the same lesson. Use cups for the baked custard because the small quantity will bake more quickly than a large bowl of it. Put soft custard in a covered glass jar and, when cool, place in the refrigerator.

4. Plan your time schedule so that the baked custard will be finished during the class period. This can be managed even in a short class period.

5. Arrange for a "custard clinic," when you will judge your products for quality. If necessary, this judging can be arranged for the following day. If the custards, when they are cold, are covered and put away carefully in the refrigerator, they will be in excellent condition for the following day.

6. On the second day use the soft custard over boiled rice, fresh fruit, or canned fruit served as a dessert.

added to the desserts served to the older members. A little planning by the homemaker-cook enables her to serve the little folks with a delightful and wholesome dessert suited to their needs, and the older members with an equally healthful but more glamorous dessert, all with a minimum of time and effort.

Making soft and baked custards. The ingredients for custards are easy to remember: milk, eggs, sugar, salt, and flavoring (usually vanilla); and the method of mixing them is simple. One dish and one spoon is sufficient for the mixing process, but you will need a cup and other spoons for measuring ingredients. Since the eggs should be beaten slightly, the mixing spoon or egg beater can be used for this purpose. The time saved by nonuse of the egg beater is small, but every bit of time saved is worth while. We should make it a habit always to use short cuts and timesaving methods.

The thickening agent in baked and soft custard is egg, so custard should be cooked at a temperature lower than that of boiling water. The soft custard should be cooked in a double boiler and stirred con-

Delightful variations are possible in custards by the addition of raisins, fruits, or flavorings.

National Dairy Council



CLASS PROJECT: BLANCMANGE OR BAVARIAN CREAM, PLAIN OR VARIATION OF BASIC RECIPE.

Make a pudding, either plain or a variation, and serve with cream, crushed fruit, or other topping.

1. Read the discussion of making blancmange and Bavarian cream, and study the recipes on pages 187 to 190.
 2. Watch a demonstration of making plain blancmange or Bavarian cream and some variations.
 3. Each group should choose the type of pudding which will be made.
 4. Make a work schedule. Since time is required for the blancmange to become firm enough to turn out of the mold, this project should probably cover two days' work.
 5. Arrange for a brief exhibit of the puddings. Judge the products according to the standards for quality given on this page.
-

SAFETY WARNING: Be careful that the water in double boiler does not boil over and extinguish gas flame.

stantly to prevent lumping. If it is cooked in a pan directly over the flame, the custard will curdle and contain tough lumps formed by too-rapid cooking of the egg. Baked custard should be protected from too high a temperature by placing the cups of custard in a pan of warm water and baking them in a slow oven. Making good custard involves egg cookery, and eggs are toughened by cooking at high temperatures.

Standards for good custard. The following questions will point out the qualities to look for in good custard.

1. Is the texture of the custard smooth? It should have no lumps or grainy quality.
2. Is the baked custard firm and tender? It should not be "leathery" or watery.
3. Is the soft custard creamy? It should have the consistency of thick cream.
4. Is the flavor pleasing? Most people prefer custards with a delicate rather than a strong flavor.

Variations of the basic custard recipe. Variations from plain custard are obtained by adding or substituting different ingredients before the custard is cooked, and combining the custard with other foods after it is cooked. Caramelized sugar may be added for caramel baked custard or cocoa for chocolate baked custard. Crushed graham crackers or raisins also make interesting variations.



Knox Gelatine Company

Bavarian cream is a milk dessert thickened with gelatin and eggs.

Soft custard (sometimes called stirred custard) can be varied to make the popular dessert known as floating island. In this case the soft custard is made with egg yolks instead of whole eggs. The egg whites are beaten stiff and used as meringue “islands” in the centers of soft custards. A spoonful of strawberry or other bright-colored jelly in the center of each meringue “island” adds an extra touch of color and flavor.

Soft custard can be used as a sauce to pour over other foods, such as sliced bananas, peaches, or boiled rice. Cubes of strawberry gelatin alternated with layers of soft custard in a tall glass make a tempting dessert.

Rennet-custards. This kind of custard is thickened by a substance called rennet, which is an enzyme similar to one found in the human stomach. It is obtained from the stomach lining of a cow and is prepared in liquid, powdered, or tablet form for use in making custard. The process is simple, but it must be done with strict attention to the temperature of the milk. The rennet enzyme acts at body temperature.

Therefore, the milk must be near that temperature when the rennet is stirred into it. Fresh milk must be used in order to secure good results. The rennet causes the milk to coagulate or to form a soft, smooth curd.

Plain rennet-custard is an excellent dessert for young children. Since it is bland in flavor, toppings of whipped cream, nuts, and fruits add interest for older people.

Blancmange or cornstarch pudding. Blancmange [blā mänzh'] is a pudding which is thickened with cornstarch. Its name is derived from the French language and means literally "white food." This pudding, like stirred custard, is made in the double boiler in order to avoid lumping and scorching. It is easy to remember the general process in making blancmange by comparing it with the general procedure for mixing custard. First, the dry ingredients—cornstarch, sugar, and salt—are mixed; second, some cold milk is added to the dry mixture so as to form a smooth paste; third, hot milk is added; and fourth, the pudding is cooked in the double boiler and stirred constantly until done.

Blancmange is usually poured into custard cups or other molds which have been rinsed in cold water. When firm, the puddings are turned out of the molds into dessert dishes. Usually, blancmange is served with cream or sliced fruit.

Variations of the blancmange basic recipe are simple to prepare. Butterscotch flavor is obtained by using brown sugar instead of white and adding a little butter; chocolate flavor, by adding cocoa to the dry ingredients and increasing the amount of sugar; and caramel, by caramelizing some of the sugar. Cornstarch custard can be made by adding beaten egg yolks to the hot mixture; and fluffy pudding, by folding in stiffly beaten egg whites just before pouring into the molds. Either type of pudding may be varied in the ways suggested above.

Standards for blancmange. Blancmange can be judged by these points:

1. Is the pudding smooth in texture? Lumpy or grainy textures are not desirable.

2. Is the consistency firm, but delicate? The pudding should resemble good jelly, being stiff enough to hold its shape but not so stiff that it is tough.

3. Is the general appearance attractive? If a topping of fruit or syrup is added, is the consistency good? Thin, watery toppings are not desirable.

4. Is the flavor pleasing? It should be well blended, with no suggestion of raw starch.

CLASS PROJECT: TAPIOCA CREAM OR RENNET-CUSTARD SERVED WITH COOKIES.

Make the pudding, using either the basic recipe or a variation. Serve the dessert with a cookie which may be baked in the laboratory or bought in packaged form.

1. Study the recipes on page 189 and read the general directions in this section.
 2. Watch a demonstration of making the basic recipe.
 3. Choose the recipe which you will use. If you choose one of the variations, you should be able to follow the directions for it without a special demonstration.
 4. Plan to serve cookies with your tapioca cream. If you are experienced, you might make the cookies. If not, it may be wise to buy packaged cookies.
 5. Plan the cover and service for the cookie and pudding.
 6. Plan your work schedule. Since the dessert should be thoroughly chilled before serving, it may be wise to serve on the next day after it is made.
-

Bavarian cream is a milk dessert. In this type of milk dessert, gelatin is the chief thickening agent, although eggs are added for flavor and aid in the thickening. Study of the recipe on page 190 will show you how the ingredients are put together. The standards for blancmange given on the previous page can be used equally well in judging Bavarian cream.

Semiprepared milk desserts. Rennet powder and cornstarch pudding can be procured in semiprepared mixtures. All that is necessary is to add the milk and cook in the usual way. Rennet powders and cornstarch puddings in different flavors are packaged in convenient form. Effort and time required with these mixtures is reduced to a minimum, and the products are very good. The chief factor to be considered in the use of these ready-prepared mixtures is cost. You will find it interesting to compare costs for semiprepared and home-mixed ingredients. Remember that, in each case, the milk is added after the mixture is made. Usually, two cups of milk are required for each package of semiprepared pudding. Compute the cost of the ingredients for two cups of milk in the home-prepared mixture. Which is less expensive? If the ready-mixed kind is more expensive, how much do you pay for having the ingredients already measured and mixed? Include also a comparison of quality of the products.

Ice cream: homemade and commercial. Ice cream is undoubtedly one of the popular foods in America—perhaps the most popular. More

CLASS PROJECT: ICE CREAM MADE IN A FREEZER OR AN AUTOMATIC REFRIGERATOR.

Make vanilla ice cream and serve it plain or as sundaes.

1. Read the general directions for making ice cream given in this unit, and study the recipes on pages 191 to 194.
 2. The whole class should cooperate in preparing the ice cream mixture and carrying out the project. Your teacher will appoint special groups for each job.
 3. Plan a work schedule which will provide for the proper attention to the ice cream at the right times. Since several hours are required for freezing and ripening the ice cream, this may mean work before school or after school.
 4. Serve the ice cream plain and as sundaes, and try different sauces and toppings. Be sure to judge the ice cream for its quality. How does it compare with the commercial product sold in your community? For quality? For flavor?
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than $1\frac{1}{2}$ *billion* quarts per year have been made, when there have been no shortages of milk, sugar, and other ingredients. Many people rate ice cream as their favorite food. Fortunately, it is nutritious as well as popular.

The basic ingredients of all ice cream are milk, cream, and sugar. Consequently, any food values found in these ingredients are also contained in ice cream. Gelatin is frequently included in the ice cream mix, and sometimes eggs are included. There is a wide variety of flavors from which to choose among the commercial ice creams, and there are numerous variations among the recipes for homemade ice creams.

How good is your ice cream? Both homemade and commercial ice cream may vary considerably in quality. Good ice cream has a high milk-solids content. This is most easily obtained by the use of evaporated milk, that is, milk which has already lost some of its water content. Too much water in an ice cream mix makes the ice cream seem like snow. It is watery and melts quickly. Good ice cream, with a high solids content, has a heavy body and is "chewy" in texture.

Cream is an important ingredient, contributing richness, smoothness, and fine, sweet flavor. There are legal requirements in every state specifying the minimum amounts of butterfat permitted in ice cream. These requirements vary from 8 per cent to 14 per cent in different states. Some ice creams contain more butterfat than is required by law. You may find that among the ice creams which are sold in your community, some have considerably more butterfat than others. Probably you cannot analyze the ice creams to find out how much butterfat each one contains, but you can judge to some extent by taste and texture. Ice



The Borden Company

This beautiful dessert is another milk dish which is good to look at and good to eat. The ice cream was made in an automatic refrigerator.

cream with high butterfat content is rich, smooth, velvety, fine-textured, and a delicate ivory-gold color.

Some manufacturers use gelatin in their ice creams. A small amount of gelatin does not harm the quality of the ice cream, and may make it smooth and agreeable to the tongue. Too much gelatin is very undesirable, because the product becomes slick and "livery." High gelatin content is used to conceal a lack of cream and to counteract the watery effect. Have you ever seen ice cream which partially retains its shape as it melts away? The remaining portion seems rubbery and spongy. This disagreeable quality is caused by too much gelatin.

Another ingredient of ice cream which should receive our attention is *air*. When ice cream is frozen, it is beaten or agitated by some type of beater in order to make it smooth and creamy. This process is necessary in all ice creams in order to prevent the mixture from freezing into a solid icy mass. A manufacturer can beat as much air as he wishes into his product, but the more air that is whipped into the ice cream, the lighter and "fluffier" it will be. Experts in ice cream manufacture be-

lieve that it should not contain more than 50 per cent air. The amount of air usually accounts for the difference in price between hand-packed and ready-packed quarts. This problem in buying will be discussed more fully in Unit X, "More Food for Less Money."

Is your ice cream safe? Ice cream is not always handled in a sanitary way by storekeepers. Surroundings may be dirty, and salespeople may not be clean and neat. Worst of all, the dishes and spoons in which ice cream and sodas are served may not have been thoroughly cleansed. Look behind the counter next time you are in an ice cream store. Are the dishes washed in *hot* water? Are the ice cream cans kept closed to prevent dust and dirt from falling into them? Are the floors under the soda fountain clean or littered with rubbish? Are the tables left sticky and smeared by being wiped carelessly with a dirty cloth?

When buying ice cream by the quart, many people choose the ready-packed product rather than the hand-packed because there is no chance for dirt and germs to get into it after it leaves the factory.

Freezer ice cream made in your own kitchen. Although millions of quarts are made commercially, some people prefer to make their own ice cream. When it is made in a freezer, a salt and ice mixture is used as the freezing agent. The freezer consists of a wooden tub or bucket with an inner container of metal. The ice cream mix is put into the metal container, and the ice and salt are packed around it. A crank which extends outside the tub turns a dasher or beater inside the can containing the mix. The crank is turned while the mix freezes so as to beat air into the ice cream and produce a smooth texture with no ice crystals.

When the crank begins to turn hard, it is time to take off the lid and remove the dasher from the ice cream. If fruit is to be added, it is done at this time, and the crank is again turned until it begins to turn hard. Great care must be taken not to let any of the salt mixture get into the ice cream. After the dasher has been removed, the ice cream should ripen for four hours or longer.

Automatic refrigerator ice cream. Small quantities of ice cream can be made easily in a mechanical refrigerator. The directions which come with the refrigerator should be followed. A smoother texture is obtained if the mix is frozen as quickly as possible; if the refrigerator has a temperature control, it should be turned to the coldest point until the mix is frozen. The texture of the automatic refrigerator dessert is also improved by stirring it once while it is freezing in order to prevent the formation of ice crystals.

Standards for good ice cream. Consider the following points when you judge the quality of an ice cream. These points apply both to home-made and commercial ice cream.

1. Is the texture smooth and creamy? It should have no ice crystal formations.

2. Is the consistency pleasing? It should not be thin and watery or rubbery.

3. Does it contain just enough air to be creamy? Too much air gives it an undesirable lightness.

4. Is the flavor rich and satisfying? It should not be sickeningly sweet or rich, and it should not have an off-flavor.

Recipes for milk desserts

SPANISH CREAM

SERVES 4

$\frac{3}{4}$ T. unflavored gelatin	2 egg yolks, slightly beaten
$\frac{1}{4}$ c. cold milk	2 egg whites, stiffly beaten
$1\frac{1}{2}$ c. scalded milk	3 T. sugar
$\frac{1}{8}$ t. salt	$\frac{1}{2}$ t. vanilla

SCALD $1\frac{1}{2}$ c. milk in the top of double boiler.

SOFTEN $\frac{3}{4}$ T. gelatin in $\frac{1}{4}$ c. cold milk.

BEAT 2 egg yolks slightly; add 3 T. sugar and $\frac{1}{8}$ t. salt; mix and slowly add scalded milk.

RETURN to double boiler and cook, stirring constantly, until the mixture coats the spoon. Remove from heat; add gelatin; stir until dissolved. Cool.

BEAT 2 egg whites until stiff and fold with $\frac{1}{2}$ t. vanilla into cool mixture.

POUR cream into a mold rinsed in cold water, and chill.

TURN from mold on to a plate and serve plain or with cream, custard sauce (page 188), sliced fruit, or berries. It may be placed by spoonfuls in dessert glasses or dishes.

BLANCMANGE OR CORNSTARCH PUDDING

SERVES 4

1 c. milk	$\frac{1}{8}$ t. salt
$1\frac{1}{2}$ T. cornstarch	$\frac{1}{2}$ t. vanilla
2 T. sugar	1 or 2 egg whites, stiffly beaten

SCALD $\frac{3}{4}$ c. milk in top of double boiler.

PLACE $1\frac{1}{2}$ T. cornstarch, 2 T. sugar, and $\frac{1}{8}$ t. salt in a cup; add $\frac{1}{4}$ c. cold milk, and stir.

- ADD to scalded milk; cook over hot water until thick, stirring constantly. Continue for 15 minutes, stirring occasionally. Cool slightly, and add $\frac{1}{2}$ t. vanilla.
- BEAT egg whites until stiff, and fold into cooked mixture.
- POUR into a mold or molds rinsed in cold water; chill; serve with custard sauce (page 188) or cream.

CHOCOLATE PUDDING

SERVES 4

- | | |
|--|--------------------------|
| $1\frac{1}{2}$ squares unsweetened chocolate | $\frac{1}{8}$ t. salt |
| $\frac{1}{3}$ c. sugar | $1\frac{1}{2}$ c. milk |
| 3 T. flour | $\frac{1}{2}$ t. vanilla |

- COMBINE in the top of a double boiler, $\frac{1}{3}$ c. sugar, 3 T. flour, and $\frac{1}{8}$ t. salt. Add $1\frac{1}{2}$ c. milk slowly, and mix well.
- ADD $1\frac{1}{2}$ squares chocolate, cut in small pieces; cook over hot water, stirring occasionally until pudding is thick, about 10 minutes.
- REMOVE from heat. Add $\frac{1}{2}$ t. vanilla and pour into a bowl or individual molds and chill. Serve with cream.

BAKED CUSTARD

SERVES 4-5

- | | |
|--|--------------------------|
| 2 c. scalded milk | $\frac{1}{8}$ t. salt |
| 3 eggs, well beaten | $\frac{1}{2}$ t. vanilla |
| $\frac{1}{2}$ t. butter or fortified margarine | F. G. nutmeg |
| $\frac{1}{4}$ c. sugar | |

- SCALD 2 c. milk, and turn oven to 325° F.
- BEAT 3 eggs; add $\frac{1}{4}$ c. sugar, $\frac{1}{8}$ t. salt, and $\frac{1}{2}$ t. vanilla; beat.
- SLOWLY add scalded milk; stir and pour into buttered baking dish. Dot with $\frac{1}{2}$ t. butter or fortified margarine, and top with F. G. nutmeg.
- PLACE baking dish in warm water, and bake in a slow oven (325° F.) for about 30 minutes. Watch to have sufficient water to keep the custard from boiling.
- NOTE: To test custard for doneness, gently press custard with finger to determine consistency. Or one may shake the custard: if it is done it should quiver.

To make a brown sugar custard, substitute 4 T. dark brown sugar for 4 T. white sugar. Omit vanilla and nutmeg.

SOFT CUSTARD

SERVES 4

- | | |
|--------------------------|------------------------|
| 2 c. scalded milk | $\frac{1}{8}$ t. salt |
| 3 eggs, slightly beaten | $\frac{1}{4}$ c. sugar |
| $\frac{1}{2}$ t. vanilla | |

SCALD 2 c. milk.

BEAT 3 eggs; add $\frac{1}{8}$ t. salt and $\frac{1}{4}$ c. sugar; beat.

ADD scalded milk slowly to egg mixture; return to top of a double boiler and cook over hot water, stirring constantly until the custard coats the spoon.

NOTE: Custard may be made with egg yolks and the whites stiffly beaten for decoration. Soft custard is an excellent sauce for fruits, gelatin, rice, or other desserts.

RENNET-CUSTARDS

SERVES 4

2 c. milk
1 package rennet powder

ARRANGE 4 dessert glasses on table.

PLACE 2 c. milk in saucepan and warm slightly (do not scald or let it get hot). Test heat by placing a drop on wrist now and then and when the milk feels warm, remove it from the heat.

ADD a package of rennet powder and stir vigorously for 1 minute; pour into glasses in which the custards will be served and chill.

NOTE: "Junket" rennet powder can be purchased in many different flavors.

Toppings suggested for rennet custard: whipped cream and maraschino cherries or crushed corn flakes; preserves or jelly; toasted marshmallows; fresh strawberries or raspberries.

TAPIOCA CREAM

SERVES 4-5

2 c. milk	2¾ T. minute tapioca
1 egg yolk	4 T. sugar
1 egg white	⅛ t. salt
½ t. vanilla	

MIX egg yolk with ½ c. milk in a saucepan. Add 2¾ T. tapioca, 2 T. sugar, ⅛ t. salt, and remaining 1½ c. milk.

BRING the mixture to a full rolling boil, stirring constantly; remove from fire, slightly cool, and add ½ t. vanilla.

BEAT egg white until fluffy; add 2 T. sugar; beat until egg forms a peak and gently fold tapioca mixture into the egg white. Chill. Serve plain or with cream.

BAVARIAN CREAM

SERVES 4

$\frac{1}{2}$ c. scalded milk	$\frac{1}{2}$ c. sugar
1 c. thin cream	$\frac{1}{4}$ t. salt

1 T. unflavored gelatin
1/4 c. cold water
1 t. vanilla

2 egg yolks, slightly beaten
2 egg whites, stiffly beaten

- SCALD 1/2 c. milk.
SOFTEN 1 T. gelatin in 1/4 c. cold water.
BEAT 2 egg yolks slightly; add 1/2 c. sugar and 1/4 t. salt; mix, and add scalded milk slowly.
COOK in the top of double boiler, stirring constantly, until mixture coats the spoon. Remove from heat, add gelatin, and stir until dissolved. Cool.
ADD 1 t. vanilla and 1 c. cream. Chill. When mixture begins to thicken, beat until fluffy.
BEAT 2 egg whites until stiff and fold into custard.
RINSE large mold, six small molds, or bowl with cold water; pour in mixture; chill.
WHEN firm, unmold or pile into dessert glasses and serve plain, with cream, custard sauce (page 188), or fruit.
NOTE: Butterscotch or Maple Bavarian cream. Use 1/2 c. firmly packed brown or maple sugar in place of the white sugar.

Chocolate Bavarian cream. Add 6 T. of cocoa or 2 squares of melted unsweetened chocolate to egg mixture.

Fruit Bavarian cream. Fold in 1 c. diced fruit just before the egg whites are added.

Nut Bavarian cream. Fold in 1/3 c. chopped pecans or almonds just before the egg whites are added.

VANILLA MOUSSE

SERVES 4

1 c. cream, whipped
1/2 t. unflavored gelatin
1/2 c. light cream
3 T. sugar

1 egg white, stiffly beaten
F. G. salt
1/2 t. vanilla

- TURN refrigerator control to coldest point.
SOFTEN 1/2 t. gelatin in 1/4 c. light cream.
SCALD 1/4 c. light cream and pour over gelatin; add 3 T. sugar and 1/2 t. salt; stir until dissolved. Chill.
BEAT egg white until stiff, and then whip cream.
FOLD gelatin, 1/2 t. vanilla, and egg white into whipped cream and pour into refrigerator tray; freeze until firm, about 4 hours. Serve plain or with chocolate or caramel sauce (page 191).

CRUNCH RING

SERVES 6-8

6 c. corn flakes
 $\frac{1}{2}$ T. butter or fortified margarine
2 T. sugar

$\frac{1}{2}$ c. honey
 $\frac{1}{8}$ t. salt

GREASE large ring or individual molds.

COMBINE $\frac{1}{2}$ c. honey and 2 T. sugar in a saucepan and cook for 10 minutes at a low temperature (246° F.) or until a drop of sirup forms a firm ball in cold water.

ADD $\frac{1}{2}$ T. butter or margarine to sirup; then add 6 c. corn flakes and lightly stir to coat flakes.

PRESS into one large ring mold or six or eight small molds.

TURN on large or small plates and fill the center with mousse or ice cream.

CHOCOLATE SAUCE

3 squares unsweetened chocolate
2 c. brown sugar, firmly packed
1 t. vanilla

$\frac{1}{8}$ t. salt
 $\frac{1}{2}$ c. cream
1 T. butter

CUT 3 squares of chocolate in small pieces and melt in the top of a double boiler.

ADD 2 c. sugar, $\frac{1}{8}$ t. salt and $\frac{1}{2}$ c. cream; stir and cook for 10 minutes. Remove from heat and let stand over hot water for 30 minutes.

ADD 1 t. vanilla. Cool, and store in a covered glass jar in the refrigerator.

NOTE: Heat over hot water before serving on ice cream.

CARAMEL SAUCE

$\frac{3}{4}$ c. light cream or evaporated milk
1 c. brown sugar, firmly packed

$1\frac{1}{2}$ T. flour
 $\frac{1}{2}$ c. butter or fortified margarine

MELT $\frac{1}{2}$ c. butter or margarine in a saucepan over a very low flame.

MIX $1\frac{1}{2}$ T. flour and 1 c. sugar together; add slowly to melted butter or margarine.

ADD $\frac{3}{4}$ c. cream or evaporated milk; stir; bring to a boil and simmer over a low flame for 10 minutes. Cool, and store in a covered glass jar in the refrigerator. Use either hot or cold.

NOTE: To heat the sauce, place the glass jar in a small pan half filled with cold water, and bring gradually to boiling point.

VANILLA ICE CREAM (Hand-turned freezer)

SERVES 8-10

4 c. milk
1 c. cream

$\frac{3}{4}$ c. sugar
 $\frac{1}{4}$ t. salt

1½ t. cornstarch
1½ t. vanilla

2 eggs, well beaten

- MIX 1½ t. cornstarch, ¾ c. sugar, and ¼ t. salt together in a saucepan; slowly add 2 c. milk and cook over low heat, stirring constantly for 15 minutes.
- BEAT 2 eggs well and slowly add to milk mixture; return mixture to the fire and cook 2 minutes, stirring constantly. Cool.
- SCALD freezer can.
- PREPARE ice and salt (one part salt to 6–8 parts ice).
- STRAIN cornstarch mixture into scalded freezer can; add remaining 2 c. milk, 1 c. cream, and 1½ t. vanilla. Place dasher in can, arrange cover securely, place on handle, and fasten. Add ice and salt and turn until the crank turns very hard.
- REMOVE ice from around freezer top; wipe off top with a cloth wrung out of hot water; remove handle; wipe top again to be sure all salt is removed.
- REMOVE lid of freezer, scrape dasher, and press ice cream down in freezer.
- WASH top of freezer and insert cork. Cover top of freezer with two or three thicknesses of waxed paper. Place top and handle on freezer. Drain off ice water through hole in the wooden bucket.
- PACK the freezer with ice and salt, using one part salt to 4 parts of ice, heaping it over the handle of the freezer.
- WRAP the whole freezer with newspapers, and allow the ice cream to ripen at least 4 hours.

FRUIT ICE CREAM (Hand-turned freezer)

SERVES 8–10

2 c. milk	grated rind and juice of ½ lemon
2 c. heavy cream	grated rind and juice of 1 orange
1 c. sugar	1 banana, mashed
¼ t. salt	⅓ c. maraschino cherries, cut fine
	⅓ c. crushed pineapple

- SCALD freezer can; add 2 c. milk, 2 c. heavy cream, 1 c. sugar, and ¼ t. salt. Mix well; freeze until nearly stiff.
- PREPARE grated rind and juice of ½ lemon and 1 orange, 1 banana, ⅓ c. maraschino cherries, and ⅓ c. pineapple. Add to freezer mixture, and freeze until very stiff.
- NOTE: Use general directions for freezing and packing vanilla ice cream (page 191).

CHOCOLATE ICE CREAM

(Refrigerator)

SERVES 4-6

$\frac{2}{3}$ c. sweetened condensed milk	1 square unsweetened chocolate
$\frac{2}{3}$ c. water	$\frac{1}{8}$ t. salt
$\frac{1}{2}$ c. whipping cream	$\frac{1}{2}$ t. vanilla

MELT 1 square chocolate in the top of a double boiler; add $\frac{2}{3}$ c. sweetened condensed milk, and cook over hot water for 5 minutes. Add $\frac{2}{3}$ c. water. Chill.

TURN refrigerator to coldest point. Put bowl into refrigerator to chill.

WHIP cream, add $\frac{1}{2}$ t. vanilla, and fold into the chilled chocolate mixture.

POUR into freezer tray and chill until half frozen.

TURN into a chilled bowl and beat until smooth. Return to freezer tray, cover with waxed paper, and freeze until stiff.

FRUIT ICE

(Hand-turned freezer)

SERVES 5-6

juice of 1 large orange	$1\frac{1}{4}$ c. water
juice of 1 lemon	1 c. sugar
2 bananas, mashed	$\frac{1}{8}$ t. salt

BOIL $1\frac{1}{4}$ c. water; dissolve 1 c. sugar and $\frac{1}{8}$ t. salt in the water. Cool.

PREPARE juice of 1 orange and 1 lemon, removing the seeds; mash 2 bananas.

PREPARE ice and salt, using 1 part salt and 6-8 parts ice.

SCALD freezer can and place all ingredients in can; freeze according to directions for hand-turned freezer (page 191).

LEMON MILK SHERBET

(Hand-turned freezer)

SERVES 8-10

$2\frac{1}{2}$ c. scalded milk	$\frac{1}{4}$ t. lemon rind
1 c. irradiated evaporated milk or cream	$\frac{1}{4}$ t. salt
	$1\frac{1}{2}$ c. sugar
$\frac{2}{3}$ c. strained lemon juice (about 4 lemons)	

SCALD $2\frac{1}{2}$ c. milk; add $1\frac{1}{2}$ c. sugar and $\frac{1}{4}$ t. salt; stir until dissolved; cool. Add 1 c. evaporated milk or cream, $\frac{2}{3}$ c. lemon juice, and $\frac{1}{4}$ t. lemon rind.

PREPARE ice and salt, using 1 part salt to 6-8 parts ice.

SCALD freezer can and place all ingredients in freezing can; freeze until firm. Follow directions for vanilla ice cream, hand-turned (page 191).

LEMON MILK SHERBET

(Refrigerator)

SERVES 6-8

$\frac{1}{3}$ c. lemon juice	2 c. milk
grated rind of 1 lemon	$1\frac{1}{4}$ c. sugar
$\frac{1}{4}$ t. lemon extract	2 egg whites, stiffly beaten

TURN refrigerator control to coldest point, and place bowl in refrigerator to chill.

COMBINE grated rind of 1 lemon, $\frac{1}{3}$ c. lemon juice, $\frac{1}{4}$ t. lemon extract, and $1\frac{1}{4}$ c. sugar; mix well.

ADD 2 c. milk; mix and pour into ice tray and freeze until quite firm.

BEAT 2 egg whites until stiff.

PLACE frozen mixture in the chilled bowl; beat until light; fold in egg whites; return to ice tray and freeze until sherbet is firm.

CRANBERRY PARFAIT

(Refrigerator)

SERVES 6

1 c. cranberry jelly	1 c. heavy cream, whipped
2 T. powdered sugar	$\frac{1}{2}$ t. almond extract
1 egg white, stiffly beaten	$\frac{1}{2}$ t. lemon extract

TURN refrigerator control to coldest point.

PLACE 1 c. cranberry jelly and 2 T. powdered sugar in a bowl and beat with a fork.

BEAT egg white until it holds a peak, and then whip cream.

FOLD egg white, cream, and $\frac{1}{2}$ t. almond, $\frac{1}{2}$ t. lemon extract into the cranberries; pour into freezer tray and freeze until firm.

PILE into sherbet or parfait glasses.

CLASS ACTIVITIES

1. Compare the costs for commercial and homemade vanilla ice cream. In figuring the cost of a homemade quart of ice cream which is made in a freezer, include the cost of the ice and salt. In figuring the cost of commercial ice cream, consider the prices for both ready-packed and hand-packed ice cream.

2. Can you save time by saving dishes when you cook? How many dishes and utensils are necessary for making plain blancmange? When making soft custard? How can you save a mixing dish?

3. Make a list of the favorite milk desserts of each member of the class. How many of these are new to other members of the class?

4. Make a survey of the way in which ice cream is handled in your local stores. What suggestions can you make for improvement in conditions?

5. Hold a "tasting party" for ice cream. Procure four or five brands of ice cream sold in your local stores. A committee should give each brand a number and serve a small spoonful of each ice cream on a paper plate. The number of each kind should be marked on the edge of the plate. Which kind seems best according to the standards for good ice cream? Why? How does price compare with quality?

6. Visit an ice cream plant.

7. Invent a new variation for custard, blancmange, or ice cream.

8. Take charge of the refreshments for a school party and serve a milk dessert.

FUN WITH FOOD AT HOME

1. Prepare and serve a milk dessert which is new to your family.

2. If there are young children in your family, prepare and serve a milk dessert which is adapted to both the younger and older members.

3. Add basic recipes for custard, blancmange, and tapioca pudding to your collection. Add also your favorite variations for each type of milk dessert.

4. Cheese is a milk food

Cheese, like some people, is a good "mixer." Quite often, it is "the life of the party." When mixed with bland foods such as macaroni, it adds flavor and zest to the dish. Sliced or cream cheese between two slices of bread makes a very good and very popular sandwich. Sharp or strong-flavored cheese served with fruit is an excellent combination for dessert. Melted cheese in white sauce is delicious when combined with vegetables, toast, or crackers. Frozen cream salad is delightful.

There are many kinds of cheese and many ways to use them. Fortunately, the taste appeal of cheese is matched by its high food value. Since it is a milk product, its nutritive value is the same as that of the milk from which it is made.

Types of cheese. Cheese is made and sold under several hundred different names in the United States, but there are actually only a small number of varieties. Cheeses vary in hardness, in method of making and curing, and in the form of the finished product.

In general, cheeses can be classified as hard, semihard, and soft. You

CLASS PROJECT: A SALAD PLATE LUNCHEON INCLUDING COTTAGE CHEESE.

Prepare and serve a luncheon having a salad plate as its chief dish.

1. Plan a menu with a fruit and cottage cheese salad, a bread accompaniment, and a beverage.
 2. Study the recipe on page 203 and watch a demonstration of making pineapple cottage cheese.
 3. Plan a work schedule which will include making the salad, making the salad dressing, and preparing everything required for the luncheon.
 4. Work quickly and surely. Remember to wash as many dishes as you can while you are preparing the luncheon, but do not slow up the preparation.
 5. Serve the luncheons properly and eat them with good manners.
 6. What food values are most abundant in your luncheon?
-

will find it interesting to get acquainted with the different varieties sold in your own community.

Salads with cheese. The food values contained in cheese combined with those found in fruits make a well-balanced and nutritious luncheon dish. Cream cottage cheese plus a tomato or a citrus fruit supplies carbohydrate, protein, calcium, vitamin B, vitamin C, and some vitamin A. Add a bread-and-butter sandwich of enriched or whole-wheat bread, and your luncheon will include iron as well as more A and B vitamins. A glass of vitamin D milk as a beverage supplies another important nutrient. Altogether, the fruit and cheese salad, sandwich, and milk supply good energy value.

The flavor combination in a cheese and fruit salad is as good as its nutritive quality. The rich flavor of cheese combines well with the tart flavor in fruit.

Other good salads can be made by combining cheese and fruit:

Grated American cheese combined with pineapple in gelatin.

Cottage cheese, Roquefort cheese, top milk in gelatin.

Cream cheese, fruit, and sirup in a frozen salad.

Crumbled Roquefort cheese in French dressing on fruit salad.

Cheese and fruit for dessert. Many people like a bit of cheese and fruit for dessert. A little soft cheese—cream, bleu, or Camembert—on crackers, with a tangerine, pear, apple, or grapes, is a very delightful dessert. Not a little of the pleasure in a cheese and fruit dessert is in the beauty of the foods as they are arranged on the platter. Notice that in the arrangement of cheese and fruit on page 198 the foods are not



National Dairy Council

Several nutrients are contained in the foods combined for this salad-plate luncheon. How many can you identify?

crowded, and that the green leaves add greatly to the attractiveness of the trays. Food which is beautiful to look at is an aid to gracious and pleasant living.

Main dishes made with cheese. There are several ways of using cheese in main dishes, in soufflés, in fondues, and in sauces. Soufflé is an oven dish made with a thick white sauce to which grated cheese is added. Stiffly beaten egg whites are folded into the sauce and cause the soufflé to rise as it is baked in the oven.

Cheese fondue is made by combining milk, bread crumbs, and cheese and then folding in stiffly beaten egg whites, which cause the fondue to rise as it bakes.

Welsh rabbit is a white sauce to which nippy cheese has been added. The sauce is poured over toast or crackers. Cheese sauce is also used as a topping for boiled or steamed vegetables such as asparagus, cauliflower, or broccoli. Many oven dishes, such as macaroni and cheese and potatoes au gratin, are made by pouring a cheese sauce over the vegetables, topping with buttered bread crumbs, and baking.



Kraft Foods Company

A fruit-and-cheese tray provides an excellent dinner dessert. Many people prefer it to a sweet dessert.

Recipes for cheese dishes

CHEESE SOUFFLÉ

SERVES 4

4 T. butter or fortified margarine	4 egg whites, stiffly beaten
2 T. flour	$\frac{2}{3}$ c. sharp cheese, cut in small pieces
$\frac{1}{2}$ t. salt	1 c. milk
F. G. pepper	4 egg yolks, beaten very light
F. G. cayenne	

PLACE 2 T. flour, $\frac{1}{2}$ t. salt, F. G. pepper, and F. G. cayenne, in the top of a double boiler; slowly add 1 c. milk and blend. Add $\frac{2}{3}$ c. cheese and 4 T. butter or margarine and cook until cheese is melted and sauce is creamy smooth. Remove from heat.

TURN oven to 350° F.

BEAT 4 egg yolks well and slowly add to cheese sauce.

BEAT 4 egg whites stiff, but not dry, and slowly fold in cheese sauce.

TURN into an ungreased baking dish and, with a teaspoon, make a ridge all around the dish, an inch from the edge, piling the mixture up in the center. This makes a better top on soufflé, when baked.

PLACE in a moderate oven (350° F.) and bake for 30 minutes.

PLACE baking dish on a plate and immediately take to the table for serving.

CHEESE FONDUE

SERVES 4

1 c. scalded milk	F. G. pepper
1 T. butter or fortified margarine	F. G. cayenne
$\frac{3}{4}$ c. sharp cheese, cut in small pieces	1 c. soft, coarse, day-old bread crumbs
1 t. salt	
3 egg whites, stiffly beaten	3 egg yolks, well beaten

SCALD 1 c. milk; add 1 T. butter or margarine, $\frac{3}{4}$ c. cheese, 1 t. salt, F. G. pepper, F. G. cayenne; mix well.

TURN oven to 350° F.

SEPARATE 3 eggs; beat whites until stiff and yolks until thick and lemon colored.

SLOWLY add egg yolks to cheese sauce, and fold in egg whites and 1 c. bread crumbs.

POUR into ungreased baking dish and bake in a moderate oven (350° F.) for about 30 minutes. Test for doneness: when a sharp knife is inserted into the center of the fondue it will come out clean.

FROZEN FRUIT SALAD

(Refrigerator)

SERVES 6-8

1 c. heavy cream, whipped	2 T. cream
2 T. lemon juice	$\frac{1}{8}$ t. salt
1 c. pineapple juice	1 $\frac{1}{4}$ c. oranges, cut in small pieces
$\frac{1}{3}$ c. mayonnaise	1 $\frac{1}{4}$ c. canned pineapple, cut in small pieces
1 egg	
2 T. sugar	10 marshmallows, cut in small pieces
2 T. flour	$\frac{1}{2}$ c. maraschino cherries, cut fine
1 3-oz. cake cream cheese	$\frac{1}{3}$ c. nut meats, cut fine

MIX 2 T. flour, 2 T. sugar, and $\frac{1}{8}$ t. salt in the top of a double boiler. Add 1 C. pineapple juice gradually and cook for ten minutes.

BEAT egg; slowly add to mixture in double boiler; cook for 3 minutes, stirring constantly. Cool.

TURN refrigerator control to coldest point.

CREAM 1 cake cheese with 2 T. cream; then add 2 T. lemon juice, 1 $\frac{1}{4}$ c. pineapple, 1 $\frac{1}{4}$ c. oranges, 10 marshmallows, $\frac{1}{2}$ c. cherries, $\frac{1}{3}$ c. nuts, and $\frac{1}{3}$ c. mayonnaise to cooled mixture.

WHIP 1 c. cream and fold into fruit mixture; pour into freezing tray, and freeze until firm.

CUT into wedges and serve on lettuce leaves.

OPEN-FACED GRILLED CHEESE SANDWICH

SERVES 6

6 slices bread, toasted light brown 2 t. milk

1 c. sharp cheese, grated or cut in small pieces F. G. pepper, salt, cayenne, and paprika

$\frac{1}{8}$ t. prepared mustard 1 T. butter or fortified margarine

TURN oven to 300° F.

MIX 1 c. cheese, F. G. salt, F. G. pepper, F. G. cayenne, $\frac{1}{8}$ t. prepared mustard, and 2 t. milk in the top of double boiler; cook until cheese is melted and smooth.

TOAST bread until golden brown; spread with cheese mixture; place on baking sheet (or individual shallow baking dishes), and broil in a very slow oven (300° F.) until slightly brown.

REMOVE from oven, cut in triangles, and sprinkle lightly with paprika. Arrange on individual plates and serve hot.

NOTE: A single strip of broiled bacon may be placed on top of cheese.

CLASS PROJECT: SUNDAY NIGHT SUPPER INCLUDING A CHEESE DISH.

1. Plan a menu with cheese soufflé, cheese fondue, Welsh rarebit, or a vegetable with cheese sauce as the main dish. Add other dishes which will be good with cheese flavor for example, tossed green salad, fresh fruit, sliced tomatoes, or apple sauce.

2. Watch a demonstration of the preparation of the cheese dish which you will make, and study the recipe.

3. Plan a work schedule so that each member of the group will know exactly what she is to do and when she is to do it.

4. Prepare and serve the supper plates.

5. Hold a "post-mortem" on the success of your work. This should be done after the supper has been eaten, because cheese dishes should be served immediately after they have been prepared. Your comments on the success of your work may very well include a criticism of eating manners, comments need not mention names, only mention of mistakes that were made by unnamed persons in the class.

CHEESE SAUCE

2 c. milk
4 T. flour
 $\frac{1}{4}$ t. salt

$\frac{1}{3}$ c. sharp cheese, cut in small pieces
F. G. pepper
F. G. cayenne

MIX 4 T. flour, $\frac{1}{4}$ t. salt, F. G. pepper, and F. G. cayenne in the top of a double boiler; slowly add 2 c. milk. Mix well and add $\frac{1}{3}$ c. cheese.
COOK over hot water, stirring constantly, until thick. Remove from heat.
SERVE over vegetables, such as cauliflower, broccoli, or oven dishes.

CHEESE RAREBIT

SERVES 4-5

2 c. milk
4 T. flour
 $\frac{1}{2}$ t. salt
 $\frac{1}{4}$ c. butter or fortified margarine
4 or 5 slices hot toast

1 c. sharp cheese, cut in small pieces
1 egg, well beaten
 $\frac{1}{4}$ t. Worcestershire sauce
F. G. cayenne

MIX 4 T. flour, $\frac{1}{2}$ t. salt, F. G. cayenne, $\frac{1}{4}$ c. butter or margarine, and 1 c. cheese in the top of a double boiler; slowly add 2 c. milk and cook until thick, stirring constantly. Remove from heat and add $\frac{1}{4}$ t. Worcestershire sauce.
BEAT egg well; slowly add to cheese sauce and cook for 2 minutes, stirring constantly.
POUR over hot toast; garnish with paprika and parsley. Serve at once.

The Borden Company



BAKED CHEESE CUSTARD AND CREAMED PEAS



The Borden Company

SERVES 4

$\frac{3}{4}$ c. milk	F. G. paprika
$\frac{1}{4}$ c. cheese, cut in small pieces	$\frac{1}{4}$ t. dry mustard
$\frac{1}{3}$ t. salt	$\frac{1}{4}$ t. Worcestershire sauce
2 eggs, slightly beaten	

SCALD $\frac{3}{4}$ c. milk in the top of a double boiler; add $\frac{1}{4}$ c. cheese, and stir until melted.

TURN oven to 325° F.

BEAT 2 eggs slightly; slowly add milk, stirring constantly; add $\frac{1}{3}$ t. salt, $\frac{1}{4}$ t. mustard, F. G. paprika, and $\frac{1}{4}$ t. Worcestershire sauce; mix well.

POUR into greased custard cups and set in a pan of warm water; bake in a slow oven (325° F.) for 45 to 50 minutes or until a knife inserted in the center comes out clean.

REMOVE from cups, loosening the edges with a spatula; arrange on a warm serving plate and cover with creamed peas and garnish with paprika.

CHEESE STUFFED FRANKFURTERS



Armour and Company

SERVES 5-6

1 lb. frankfurters	$\frac{1}{2}$ c. chopped peanuts
1 c. grated American cheese	$\frac{1}{4}$ c. salad dressing
pimento or green pepper strips	slices of dill pickle

MIX $\frac{1}{2}$ c. chopped peanuts, 1 c. grated cheese, and $\frac{1}{4}$ c. salad dressing together.

CUT a slit in each frankfurter to within $\frac{3}{4}$ inch of ends.

FILL each slit with cheese mixture; place on a broiler pan and set 5 inches from flame; broil for 7 to 8 minutes.

ARRANGE on warm platter, surrounded by buttered green beans.

GARNISH beans with strips of pimento and frankfurters with green pepper or pickle.

PINEAPPLE AND CHEESE SALAD

SERVES 4

4 slices of canned pineapple	$1\frac{1}{2}$ T. cream
4 T. cottage or cream cheese	washed and chilled lettuce leaves
paprika	

- MIX 4 T. cottage or cream cheese with 1½ T. cream.
- ARRANGE lettuce on 4 salad plates with a pineapple ring on top of lettuce. In the center of pineapple, place cheese and garnish with paprika. Serve with French dressing or mayonnaise.

CLASS ACTIVITIES

1. Are you acquainted with several kinds of cheese? Arrange an exhibition of cheeses which will include natural and processed cheeses, a mold-ripened cheese, a hard cheese, a semihard cheese, and a soft cheese.
2. Plan three well-balanced luncheon or supper menus in which cheese is a main dish.
3. What is your favorite kind of cheese? Your favorite cheese dish? Compare your preferences with those of the other members of the class.
4. Plan for a demonstration of an arrangement of a fruit and cheese dessert tray.

FUN WITH FOOD AT HOME

1. Make a frozen cheese salad and serve as a party dessert.
2. Invent a new kind of cheese canape or hors d'oeuvre.
3. Serve a cheese dish to your family which is new to them. Report on its success.
4. Prepare and serve a tray of appetizers for a "company" dinner. Report on its success as a pleasant beginning for a social occasion.

A SUMMARY OF YOUR STUDY ABOUT MILK

This unit of work has included the preparation of milk dishes, a discussion of nutritive values, grades and types of milk, kinds of cheese, and safe handling of milk. Have you acquired ideas and skills about each of the topics listed below?

Nutritive values

Vitamin A in milk fat
 Fuel values in milk
 B vitamin content
 Deficiency of vitamin C
 Lack of iron
 Enrichment with vitamin D
 Rich in calcium
 Daily personal milk requirement
 Food value of cheese

Skills in food preparation

Milk drinks
 Custards
 Rennet custards
 Blancmange
 Bavarian cream
 Tapioca cream
 Ice creams and sherbets
 Cheese salad
 Cheese appetizers and desserts

WHAT DO YOU KNOW ABOUT MILK AND MILK PRODUCTS?

The following quiz questions will help you to check your knowledge of food values in milk and your understanding of milk recipes.

A test on food values in milk

Some of the following statements are correct and some are not. On a separate sheet of paper write the number of each statement and the word "true" or "false" after it. **Do not write in this book.**

1. Iron is supplied more abundantly in milk than in any other food.
2. Calcium in milk helps to build bones and teeth.
3. Only 5 amino acids are present in milk protein.
4. Vitamin A is especially rich in skim milk.
5. Milk is not a good source of vitamin C.
6. Irradiation adds vitamin D to milk.
7. Carbohydrate in milk consists chiefly of starch.
8. Cottage cheese contains all the nutrients of skim milk.
9. Ice cream is a good energy food.
10. Blancmange contains a large amount of vitamin C.
11. Baked custard contains approximately the same food values as soft custard.
12. Cheese contains much more food value per ounce than an ounce of milk.
13. A young person who is still growing should have 1 or 2 glasses of milk every day.
14. Strawberry ice has the same food value as strawberry ice cream.

Can you evaluate a milk recipe?

There is a very bad mistake in each of the following recipes for milk dishes. What is wrong in each case? On a separate sheet of paper write the name of each recipe, and opposite the name write the error found in each case. **Do not write in this book.**

Blancmange

1 c. cornstarch	$\frac{1}{2}$ c. cold milk
$\frac{1}{4}$ c. sugar	$1\frac{1}{2}$ c. scalded milk
$\frac{1}{8}$ t. salt	1 t. vanilla

Mix dry ingredients. Add cold milk and blend. Add hot milk gradually. Cook in double boiler, stirring until thick. Continue cooking for 20 minutes.

Baked Custard

3 slightly beaten eggs
 $\frac{1}{4}$ c. sugar
 $\frac{1}{4}$ t. salt

2 c. milk
 $\frac{1}{2}$ t. vanilla

Combine eggs, sugar, and salt. Add milk slowly; add flavoring. Pour into custard cups and bake in hot oven (450° F.) until done.

Cheese Soufflé

$\frac{1}{4}$ c. butter
4 T. flour
1 c. milk

$\frac{1}{2}$ lb. nippy cheese, grated
4 eggs

Melt butter in double boiler; add flour, salt, and milk to make white sauce. Add cheese and stir until melted. Beat eggs slightly and add. Bake in slow oven for 1 hour or until done.

Cocoa

6 T. cocoa
6 T. sugar
 $\frac{1}{2}$ c. water

$2\frac{1}{2}$ c. milk
 $\frac{1}{4}$ t. salt

Mix dry ingredients; add water and cook 6 minutes. Stir in milk, and boil 15 minutes.

Which kind of milk would you choose?

Each of the following questions has several possible answers. On a separate sheet of paper write the number of each question, and opposite the number write the correct answer.

1. If you were badly underweight, which kind of milk would you choose?
skim milk buttermilk whole milk
2. If you were very much overweight, which milk would you choose?
cream skim milk whole milk
3. If you lived in a place where there is little sunshine, which milk would be especially valuable?
vitamin D skim milk buttermilk
4. If you lived in a small town in Texas and had no refrigerator, which milk would be particularly convenient?
irradiated canned buttermilk

REFERENCES FOR FURTHER READING

Amidon, E. P., Bradbury, D. E., and Drenckhahn, V. V., *Good Food and Nutrition*. John Wiley and Sons, Inc., 1946. Pp. 12-25, 41-48.

- De Gouy, Louis P., *Ice Cream Desserts for Every Occasion*. Hastings House, New York, 1938.
- Harris, F. L., and Henderson, R. A., *Foods*. D. C. Heath and Company, 1938. Pp. 115-125.
- Harris, J. W., and Speer, E. L., *Everyday Foods*. Houghton Mifflin Company, 1946 and 1941. Pp. 54-64, 512-515, 519-527.
- Hughes, Osee, *Introductory Foods*. The Macmillan Company, 1940. Pp. 72-107.
- Robertson, Helen, *Merry Mixer Cookbook*. J. B. Lippincott Company, 1941. Pp. 157-169, 193-218.
- Silver, Fern. *Foods and Nutrition*. D. Appleton-Century Company, Inc., 1941. Pp. 199-205.
- Trilling, M. B., and Nicholas, Florence W., *You and Your Money*. J. B. Lippincott Company, 1944. Pp. 1-11, 25-56.

Pamphlets

- Dairy Products*. Better Buymanship Series. Household Finance Corporation. 919 N. Michigan Ave., Chicago 11, Illinois.
- Milk Ordinance and Code*. Public Health Bulletin No. 220. Federal Security Agency. U. S. Public Health Service, Washington, D. C.
- Publications by the National Dairy Council. 11 North Canal Street, Chicago, Illinois.
- Publications by the Evaporated Milk Association. 307 N. Michigan Avenue, Chicago 1, Illinois.

5

The Food Fats

The “fat family” includes butter, margarine, lard, suet, bacon drippings, and oils from peanuts, soybeans, cotton seeds, corn, nuts, and olives. All of these fats rate high in fuel value, but two of them are also excellent sources of an extremely important nutrient, vitamin A. Butter and fortified margarine are so important for both fuel value and vitamin A content that they are classified separately among the seven basic food groups. These two fats constitute Group Seven on the basic food chart, shown on page 9. Nutrition experts advise eating from *Group Seven at every meal*. In this unit of work we shall pay special attention to butter and margarine, and shall also include the other food fats.

Fats are used in three ways to make foods more tasty and nutritious:

1. Some fats and oils are used on the table without cooking. Butter and margarine are used as spreads for bread, and oils are used in mayonnaise and French dressing.
2. Fats are used for shortening in baked products.
3. Fats are used for frying many foods.

Everyone should learn how to select the right fats for each of these processes, to prepare and serve foods with fats, and to understand the food values provided in each case.

The “fat family” is interesting to study because the study includes making the popular and delightful foods such as cookies, cakes, and pies and such appetizing dishes as French fried potatoes, fritters, croquettes, and doughnuts. The basic processes for the preparation of these foods are discussed in this unit of work.

1. Butter and margarine

Butter-making was carried on by ancient people as far back as twenty centuries before Christ. At first, it was little used as food, being employed chiefly as medicine and as an ointment after bathing. In time, it became an established article of food, valued both for cooking purposes and as a spread for bread. Margarine is a much newer article of food. During the Franco-Prussian War, when there was a butter shortage, Napoleon III offered a prize for an alternate for butter which was "palatable, appetizing, nutritious, and economical." The award was won by a chemist, Mege-Mouriez, who produced the first margarine. It was first used by the French in 1869 and was brought to the United States six years later. Since that time, its use on the table and for cooking has increased steadily, until many millions of pounds are now manufactured annually.

Food values in butter and margarine. Since butter is made from cream or milk fat, it is obvious that the same nutrients found in cream will also be found in butter. The extremely high fat content gives a food rich in fuel value. A $\frac{1}{2}$ -ounce pat of butter or margarine gives you about 100 calories. If you eat $\frac{1}{2}$ -ounce of food fat at each meal, you have consumed about 300 calories, which is a substantial part of your daily calorie needs.

Vitamin A, discussed in the last unit (pages 170 and 171), is present in butter in considerable quantities. However, the amount varies according to the season when the milk is produced. Summer butter averages about 12,000 units per pound, but winter butter averages only 2,000 units per pound. Because of this wide variation, some nutritionists recommend eating cold storage butter during the winter months.

Margarine does not normally contain any vitamin A, but during recent years most margarine manufacturers have added 9,000 units of vitamin A per pound. At present time, some manufacturers add as much as 15,000 units per pound, and it is believed that this practice will be generally adopted.

Whole milk contains small amounts of vitamin D, and butter made from it retains this nutrient. Butter made from vitamin D or irradiated milk is a good source of the sunshine vitamin. Margarine fats do not naturally contain vitamin D, but many manufacturers now add this vitamin to their products.

What is margarine made of? Several different fats such as soybean oil, cotton seed oil, corn oil, peanut oil, and meat fats are used in the

CLASS PROJECT: A TASTING PARTY TO TEST FLAVORS OF MARGARINES AND BUTTERS.

This project is intended to give you experience in comparing flavors of butter and margarine.

1. Collect samples of several different brands of margarine and butter and, if possible, of government-graded butter. Give each sample a number so that you will not know the name of any spread which you taste.
 2. Mark the numbers of each brand or grade on the edges of paper plates. Then put a small pat of each margarine or butter near the correct number.
 3. Place small squares of bread in the center of each plate.
 4. Test the flavor of each sample by spreading it on a square of bread and tasting.
 5. Write down your conclusions as follows:
 - a. Which samples are butter?
 - b. Which are margarine?
 - c. Which butter has the best flavor?
 - d. Which margarine has the best flavor?
 - e. Do any of the spreads have objectionable flavors? Rancid or strong?
 - f. Which spread do you prefer?
 6. Compare your findings with those of the other members of the class. How does the price of the most popular spread compare with the prices for the others?
-

manufacture of margarine. Each manufacturer uses his own formula for his margarine. Usually, one or more of the oils is blended with pasteurized, cultured, or skim milk and salt is added for flavor. The blending is accomplished by churning the fats in the milk, thus giving the product a flavor similar to that of butter.

Most margarines are made entirely from vegetable fats, although a few brands are made with animal fats.

Margarine is the preferred name. You will notice that all margarine cartons are labeled with the name "Oleomargarine." This is the old-fashioned name for margarine, and its use is required by law. However, the name is no longer correct because most margarines do not contain any oleo, which is an animal fat. Common usage, except in labeling, now indicates a preference for the term "margarine."

Restrictive laws affect prices. Investigation of prices always shows that margarine is sold at a much lower price than butter. Well-informed consumers know that margarine could be produced even more cheaply if it were not for various federal and state taxes. A federal law requires

the margarine manufacturer to pay a 600-dollar license fee annually, and a 1/4-cent tax on every pound of uncolored margarine which he sells. For colored margarine he must pay a tax of 10 cents per pound. These costs are naturally passed on to the consumer. Retailers must pay 6 dollars annually for a license to sell uncolored margarine and 48 dollars for a license to sell both colored and uncolored margarine. These costs are also passed on to the consumer.

Many states have their own laws requiring license fees from margarine manufacturers, wholesalers, retailers, and, in some states, from restaurant keepers and boardinghouse operators who use margarine. Some of these license fees are so high that they tend to prohibit the manufacture and sale of margarine. Small grocery stores, restaurants, and other businesses cannot sell enough margarine to cover the cost of the high license fee.

These laws have been promoted by dairy men who fear that low-priced margarine will cut into their butter sales. In recent years the margarine laws have been repealed in several states.

Laws governing content and hygienic handling. Butter is the only food which has a legal standard fixed by a federal law. The Congress of the United States passed a law stipulating that butter must contain 80 per cent milk fat.

Most margarine also contains at least 80 per cent fat, but this is not required by a specific law. However, the Food and Drug Administration of the Federal Security Agency has adopted a "Definition and Standard of Identity for Oleomargarine" which states that "The fat content of oleomargarine, including any milk fat used, commonly constitutes not less than 80 per cent of the finished product, and a minimum fat content of 80 per cent is recognized in the industry as proper and desirable."

Hygienic handling is required by the Federal Food, Drug and Cosmetic Act for all butter and margarine which crosses state boundaries in interstate commerce. Most states also have good pure-food laws which guard the safety of butter and margarine made and sold within state boundaries. It is reassuring to know that the butter and margarine which comes to our tables has been protected from careless handling and exposure to dirt and bacteria.

How good is your butter? Quality in butter varies from very good to very poor. The United States Department of Agriculture has established standards for quality grades based on flavor, body, color, and salt. The standards for each grade are described briefly on the next page.

- 93 score (highest) is fine, sweet, and clean in flavor, with firm body, and with color and salt light or medium.
- 92 score is not quite so fine in flavor and may have very slight irregularities in color. This is good table butter and generally is the highest score found in retail markets.
- 91 score is only fairly sweet and clean in flavor. The color is irregular, and the salt may be high. To some people this butter has an objectional flavor.
- 90 score may be flat and undesirable in flavor. Texture and color may be uneven. The body is only fairly firm.
- 89 score may have objectionable flavors. The body is less firm than in higher qualities and the color is wavy. Salt may be "gritty."
- 88 score has very objectionable flavors and is not suitable for table use.

Unless you know the meaning of these butter scores you may think that all of them are high scores because they stand high in a possible scale from 1 to 100. There is a difference of only five points from the top grade to the lowest, but there is a tremendous difference in quality.

In many large markets, butter is graded by expert government graders. This is not mandatory but is encouraged by the government and by consumers who are interested in getting good quality for their money. Each pound of graded butter bears a label on its wrapper which indicates the score.

During World War II the Food Distribution Administration issued an order establishing a new and simplified system for grading butter. The order states that "The nomenclature of U. S. grades of creamery butter shall be as follows: U. S. Grade AA or U. S. 93 Score; U. S. Grade A or U. S. 92 Score; U. S. Grade B or U. S. 90 Score; U. S. Grade C or U. S. 89 Score; U. S. Cooking Grade; and No Grade."

Butter grades are used chiefly for buying and selling among producers and distributors. Only a small portion of the butter sold on the retail market bears a U. S. grade. Yet there is no good reason why consumers should not be able to buy graded butter. A demand for government-graded butter by consumers would undoubtedly result in more graded butter in the retail markets.

Flavor in butter and margarine is important. One of the most important functions of fat in food preparation is to give pleasing flavor and richness to other foods. Butter or margarine provides a flavor which combines well with the bland flavor of bread. These table fats are also

good on boiled or steamed vegetables and in soups, cookies, and many other foods.

Although the flavors of butter and margarine are similar because both are churned in milk, many people prefer butter and some prefer margarine. Good butter is mild and sweet and has the characteristic flavor of milk fat. Margarine is also mild and sweet but has a slightly different flavor, depending upon the fats from which it is made and upon the processing.

Variations in flavor of butters depend partly upon the ingredients. A large proportion of creamery butter is made from sour cream and is justly popular. Considerable butter is made from sweet cream and is generally a little more expensive than sour butter because of the greater care required in keeping the cream sweet until ready for churning. The flavor of sweet cream butter is more delicate than that which is made from sour cream. Sweet butter is unsalted butter and may be made from either sweet cream or sour cream.

Variations in margarine flavors depend upon the ingredients and the manufacturing process. The oils are especially processed to secure a suitable consistency, to destroy undesirable flavors, and to leave them sweet, pure, and clean. Vegetable oils are used to make the "nut" margarine.

Modern margarine is very different from the greasy, ill-flavored "butterine" of half a century ago. In its early days, margarine was palmed off as butter when possible, but modern margarine manufacturers desire to sell it only for what it is, a good, wholesome, nutritious spread for bread with its own mild, sweet flavor.

CLASS ACTIVITIES

1. Collect labels from cartons of butter and margarine. Study them for statements of fat content, vitamin A content, and vitamin D content. Arrange a bulletin board exhibit of the most informative labels.
2. Compare prices of butter and margarine sold in your local stores.
3. Does your state have restrictive laws governing the manufacture and sale of margarine?
4. Appoint a committee to report on the history of margarine legislation in the United States.
5. What have you learned about flavors in butter and margarine? Have you learned to like a flavor which you previously disliked? Have you learned to be more "choosy" about the flavor of butter? Or have you become more broad-minded in your acceptance of varying flavors?

2. Goodies for the cooky jar

Everybody likes cookies! There is such a variety of kinds that one cannot fail to have a favorite. Some of them are hearty and hunger-satisfying; others are dainty tidbits to grace the most elaborate tea table. They may be soft or crisp, white, butterscotch, chocolate, molasses, or spiced; and they may be varied with raisins, fruits, or nuts. Still further variations are obtained by cutting them in fancy shapes and by decorating them with frostings or nuts. The variety seems almost endless.

It would not be possible to learn all there is to know about making cookies in this study unit, but we can get acquainted with some basic recipes, a few variations, the general method of mixing, and standards for judging cooky products.

Basic ingredients for cookies. In general, the basic recipes for cookies include fat or shortening, sugar, flour, and flavoring. Some recipes include baking powder or soda and milk or other liquids. Very little baking powder or soda is used in making cookies because lightness is not an important factor as it is in cakes. In some recipes no leavening agent except beaten eggs is required. Very little liquid is used in making cooky doughs and, in some cases, none at all is used. Little or no liquid is desirable because too much flour makes tough cookies. The more liquid that is used, the more flour will be required to form a workable dough. Therefore, very small amounts of liquid, if any, are included in good cooky recipes.

CLASS PROJECT: DROP COOKIES AND MILK FOR A MIDAFTERNOON LUNCH.

Make drop cookies and serve with plain milk or other milk drinks as a mid-afternoon or after-school snack.

1. Study the recipes for drop cookies on pages 218 to 220 and select the one which you will use. Different groups may select different recipes.
 2. Watch a demonstration of making drop cookies. Follow each step carefully, and check with the general directions given in this unit.
 3. Make a work schedule which includes mixing the dough, baking, cooling, serving, and judging your product.
 4. Plan to serve your cookies on a plate from which each member of the group will take a cooky. Arrange the cookies and the glasses of milk nicely. See the illustration on the opposite page.
 5. Judge your cookies according to the standards given on page 217.
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Either cake flour or all-purpose flour may be used to make cookies, but the former gives a more delicate texture and a tender crumb.

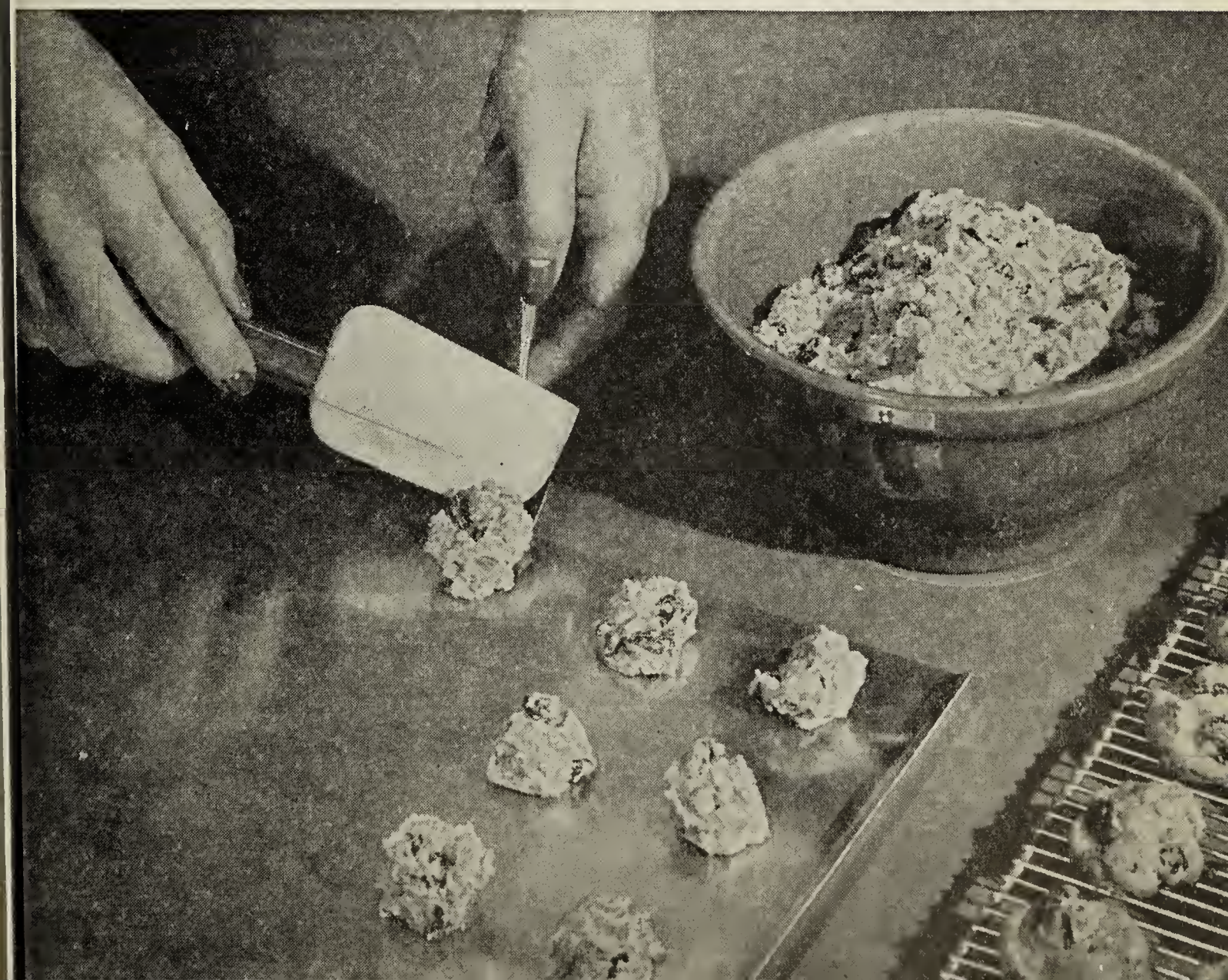
Shortening for cookies. Most cooky recipes include fat or shortening as an essential ingredient. Fat used in baked products is called shortening because it renders the food "short." This means that product is easily crumbled or "rich." The omission of shortening from basic cooky recipes would result in cookies which are tough and almost nonbreakable. A cooky with a large amount of shortening is very rich and is easily broken.

Butter, margarine, lard, or vegetable fat may be used for cooky shortening. Some people prefer butter or margarine for cookies because of the flavor. This is especially desirable in cookies which do not have strong flavors such as chocolate, molasses, or peanut butter.

Lard is obtained from hogs and is usually the cheapest of the cooking fats. It contains more fat than the margarines or butter, being 100 per cent fat. The best quality of lard, made from the fat of the sides and abdominal cavity, is called leaf lard. It is mild in taste and odor. Lower grades of lard are made from fat taken from other parts of the animal

Drop cookies are easy to make and good to eat.

Wheat Flour Institute



CLASS PROJECT: COOKIES AND TEA FOR A PARTY.

Prepare rolled or refrigerator cookies and tea for a party. Serve them from a tea table.

1. Arrange to take charge of the refreshments for an afternoon party. You might provide the refreshments for a Parent-Teachers' meeting, a school tea-dance, or a faculty meeting.

2. Watch a demonstration of making rolled cookies and refrigerator cookies. Also a demonstration of making and serving tea.

3. Study the recipes on pages 221 to 223 and the directions for making tea on page 225.

4. Plan your work so that your cookies will be baked the day before the party.

5. Make a definite working schedule so that each girl will know exactly what she is to do on the day of the party.

6. Judge your success at the first class meeting after the party. How could you improve? What things were done best?

and are slightly acid in taste. A good grade of lard is firm when cold and has good keeping quality. Bland lard is especially treated so that it is flavorless and has excellent keeping qualities.

Cooking fats made entirely from vegetable oils are now obtainable. The oils are converted into solid fats by hydrogenation, or the addition of hydrogen to unsaturated fat. These vegetable fats have excellent keeping qualities and good shortening power, can be used for frying, and are bland in flavor, or tasteless.

✓ The selection of shortening for home use should depend upon price, flavor, convenience, and keeping quality. Most people prefer the flavor of butter, but it is the most expensive of the shortenings and requires refrigeration for storage. Bland leaf lard is much cheaper than butter and can be kept safely without refrigeration for a long time, but it has no flavor. The hydrogenated vegetable fats have splendid keeping quality on the pantry shelf, have no flavor, and are generally medium in price. A point in favor of the fats which do not require refrigeration is that they are always ready for instant creaming with sugar and eggs when you wish to make cookies. Some cooks compromise between high-priced fats with flavor and low-priced fats without flavor by combining them in shortening for cakes or cookies.

Variations in cooky technique. Many variations in cookies result from the use of different ingredients, and some differences are obtained by tricks in handling the dough.



Woman's Day

Cookies are a favorite refreshment at an informal tea party.

1. Drop cookies can be made to resemble a rolled cooky by pressing a flat-bottomed glass on the top of the spoonful of dough as shown on page 219.

2. Refrigerator cookies are made by rolling the dough into a long cylinder and storing it in the refrigerator until chilled. Each cooky is sliced off the roll as shown on page 221. This is a timesaver in cooky preparation, as it requires much less time than rolling and cutting. It is often advantageous to bake refrigerator cookies at the same time the rest of a meal is being prepared.

3. Filled cookies are two-deckers with a filling of dates, jam, or similar filler. The bottom layer is rolled and cut, the filler is put on top of it, then the top layer of the cooky is added. Some filled cookies have open tops made by cutting a circle out of the top layer.

4. To give rolled cookies a corrugated surface, score the top of each rolled cooky with a fork after it has been placed on the baking sheet.

Standards for judging cookies. The following questions will help you to evaluate the success of your cookies or the quality of bakery cookies.

1. Are the cookies alike in size, shape, and form? Whatever the type of cooky may be, those from the same batch should be uniform in appearance.

2. Are the cookies good in color, depending upon their type? Pale color generally indicates underbaking; and dark, crusty edges indicate overbaking. Burned spots are very objectionable.

3. Is the texture good, depending on the type of cooky? Some cookies are crisp and some are soft, but none of them should be tough or doughy.

4. Is the flavor good, well blended, and characteristic of the type? Cookies should not taste excessively of flour, fat, sweets, flavoring, or other ingredients.

Recipes for cookies

MOLASSES OATMEAL COOKIES

MAKES 5-6 DOZEN COOKIES

1¾ c. sifted all-purpose flour	½ c. brown sugar, firmly packed
1 t. soda	⅓ c. evaporated milk
¼ t. salt	1 t. vinegar
2 t. cinnamon	½ c. molasses
¾ t. cloves	2 eggs
½ c. shortening	1 c. raisins, washed and drained
2 c. quick-cooking oats	

SIFT flour, measure 1¾ c.; add 1 t. soda, ¼ t. salt, 2 t. cinnamon, and ¾ t. cloves; sift.

CREAM ½ c. shortening and ½ c. sugar together; add ½ c. molasses, and mix well.

ADD 1 t. vinegar to ⅓ c. milk.

TURN oven to 375° F., and lightly grease baking sheets.

BEAT 1 egg at a time into fat and molasses until mixture is light and fluffy.

STIR in 2 c. oats; add sifted flour; blend well, adding 1 c. raisins with the last few stirs.

DROP by teaspoonfuls two inches apart on baking sheet and bake in a moderate oven (375° F.) for about 15 minutes.

FRUIT COOKIES

MAKES 2½ DOZEN COOKIES

1½ c. sifted all-purpose flour	½ t. cinnamon
½ t. soda	⅓ t. nutmeg
½ t. salt	¼ t. cloves
1½ t. baking powder	½ c. chopped walnuts
½ c. shortening	½ c. chopped raisins
1 c. brown sugar, firmly packed	1 egg
½ c. sour milk	

CHOP $\frac{1}{2}$ c. nuts and $\frac{1}{2}$ c. raisins.
 SIFT flour, measure $1\frac{1}{2}$ c.; add $\frac{1}{2}$ t. salt, $1\frac{1}{2}$ t. baking powder, $\frac{1}{2}$ t. cinnamon, $\frac{1}{3}$ t. nutmeg, and $\frac{1}{4}$ t. cloves; sift.
 CREAM $\frac{1}{2}$ c. shortening and 1 c. sugar until fluffy.
 ADD $\frac{1}{2}$ t. soda to $\frac{1}{2}$ c. sour milk. Turn oven to 350° F.
 ADD egg to sugar mixture, beat well, add flour and milk alternately; mix well. Add nuts and raisins, and drop by teaspoonfuls at least two inches apart on an ungreased baking sheet; bake in a moderate oven (350° F.) for 12 to 15 minutes. Cool on a rack.

LEMON DROPS



Wheat Flour Institute

This method of shaping cookies involves pressing a dropped cookie with a flat-bottomed glass.

MAKES $2\frac{1}{2}$ DOZEN COOKIES

1 c. sifted all-purpose flour
 $\frac{1}{4}$ t. soda
 $\frac{1}{4}$ t. salt
 $\frac{1}{4}$ c. shortening
 $\frac{1}{2}$ c. sugar

1 egg
 $\frac{1}{2}$ t. vanilla
 2 T. lemon juice
 $\frac{1}{2}$ T. lemon rind
 2 T. lemon sugar

MIX 2 T. sugar and $\frac{1}{2}$ T. lemon rind together for lemon sugar.

SIFT flour, measure 1 c.; add $\frac{1}{4}$ t. soda and $\frac{1}{4}$ t. salt; sift.

CREAM $\frac{1}{4}$ c. shortening and $\frac{1}{2}$ c. sugar until light and fluffy. Add egg and $\frac{1}{2}$ t. vanilla; beat well.

TURN oven to 375° F. Lightly grease baking sheets.

- ADD flour, 2 T. lemon juice, and $\frac{1}{2}$ T. lemon rind alternately to creamed mixture; mix well.
- DROP by teaspoonfuls on baking sheet; then press the dough flat with the bottom of a water glass which has been covered with a wet cloth; sprinkle with lemon sugar, and bake in a moderate oven (375° F.) for 15 minutes. Cool on rack.

TOLL HOUSE COOKIES

Nestle's Chocolate Company

MAKES 36 TO 40 COOKIES

- | | |
|---|----------------------------------|
| 1 c. plus 2 T. sifted all-purpose flour | 7 oz. semisweet chocolate bits |
| $\frac{1}{2}$ t. salt | 6 T. brown sugar, firmly packed |
| $\frac{1}{2}$ t. soda | 1 t. hot water |
| $\frac{1}{2}$ c. shortening | $\frac{1}{2}$ c. chopped walnuts |
| 6 T. granulated sugar | 1 egg, well beaten |
| | $\frac{3}{4}$ t. vanilla |
- SIFT flour, measure 1 c. plus 2 T.; add $\frac{1}{2}$ t. salt and $\frac{1}{2}$ t. soda; sift.
- CREAM $\frac{1}{2}$ c. shortening; add 6 T. granulated sugar and 6 T. brown sugar. continue to cream until light and fluffy.
- TURN oven to 375° F. and grease baking sheets lightly.
- BEAT egg well; add to fat and sugar; add 1 t. hot water and flour. Mix well.
- ADD $\frac{1}{2}$ c. nut meats, 7 oz. chocolate bits, and $\frac{3}{4}$ t. vanilla; blend.
- DROP by teaspoonfuls on baking sheet and bake from 10 to 12 minutes in a moderate oven (375° F.). Cool on rack.
- NOTE: If batter is very stiff, a few drops of hot water should be added.

SPECIAL DROP COOKIES

MAKES 18 COOKIES

- | | |
|---|--|
| $\frac{7}{8}$ c. sifted all-purpose flour | 2 T. milk |
| 1 t. baking powder | 1 egg, well beaten (save 1 t. egg white for topping) |
| $\frac{1}{4}$ t. salt | $\frac{1}{2}$ t. vanilla |
| $\frac{1}{2}$ c. sugar | $\frac{1}{8}$ t. almond extract |
| 3 T. shortening | |

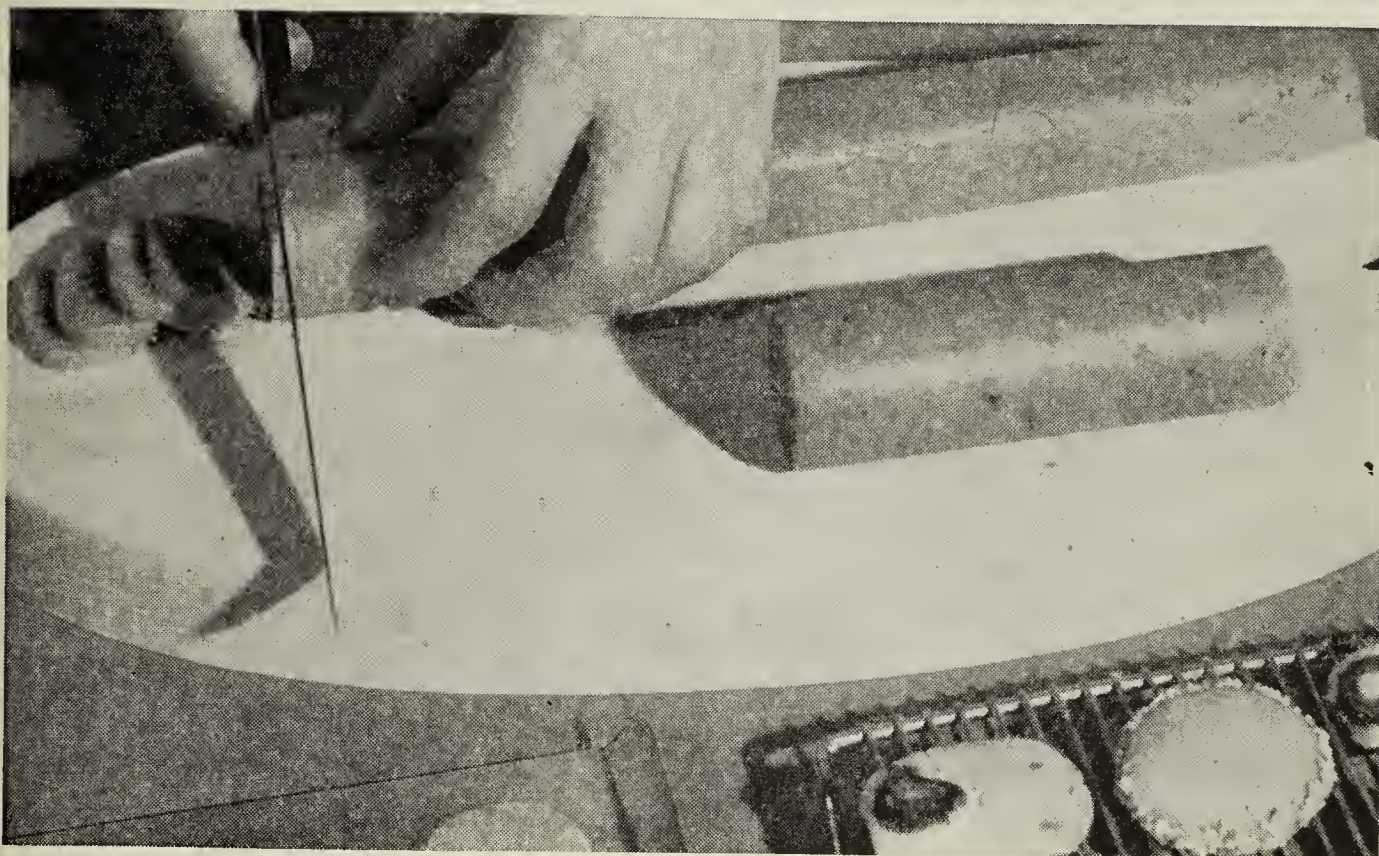
Topping

- | | |
|-------------------------------|-----------------------|
| 1 t. egg white, beaten | 4 maraschino cherries |
| $\frac{1}{4}$ c. chopped nuts | |

- SIFT flour, measure $\frac{7}{8}$ c.; add 1 t. baking powder and $\frac{1}{4}$ t. salt; sift.
- BEAT egg well, saving 1 t. white for topping.
- CREAM 3 T. shortening with $\frac{1}{2}$ c. sugar until light and fluffy; add egg, $\frac{1}{2}$ t. vanilla, and $\frac{1}{8}$ t. almond extract; beat.

TURN oven to 375° F. and lightly grease baking sheet.
 ADD flour and 2 T. milk alternately to above mixture; drop by teaspoonfuls on baking sheet; pat with spoon or spatula; brush with beaten egg white; sprinkle with nuts and in the center place a piece of cherry. Bake in a moderate oven (375° F.) for 15 minutes. Cool on cake rack.

REFRIGERATOR COOKIES



Wheat Flour Institute

Cookies can be sliced from a roll of dough previously chilled in the refrigerator.

MAKES ABOUT 50 COOKIES

1¾ c. sifted all-purpose flour	½ t. salt
½ c. shortening	⅓ t. soda
½ c. granulated sugar	1 egg, well beaten
½ c. brown sugar, firmly packed	½ c. chopped nut meats
¾ t. vanilla	

SIFT flour, measure 1¾ c.; add ⅓ t. soda and ½ t. salt; sift.

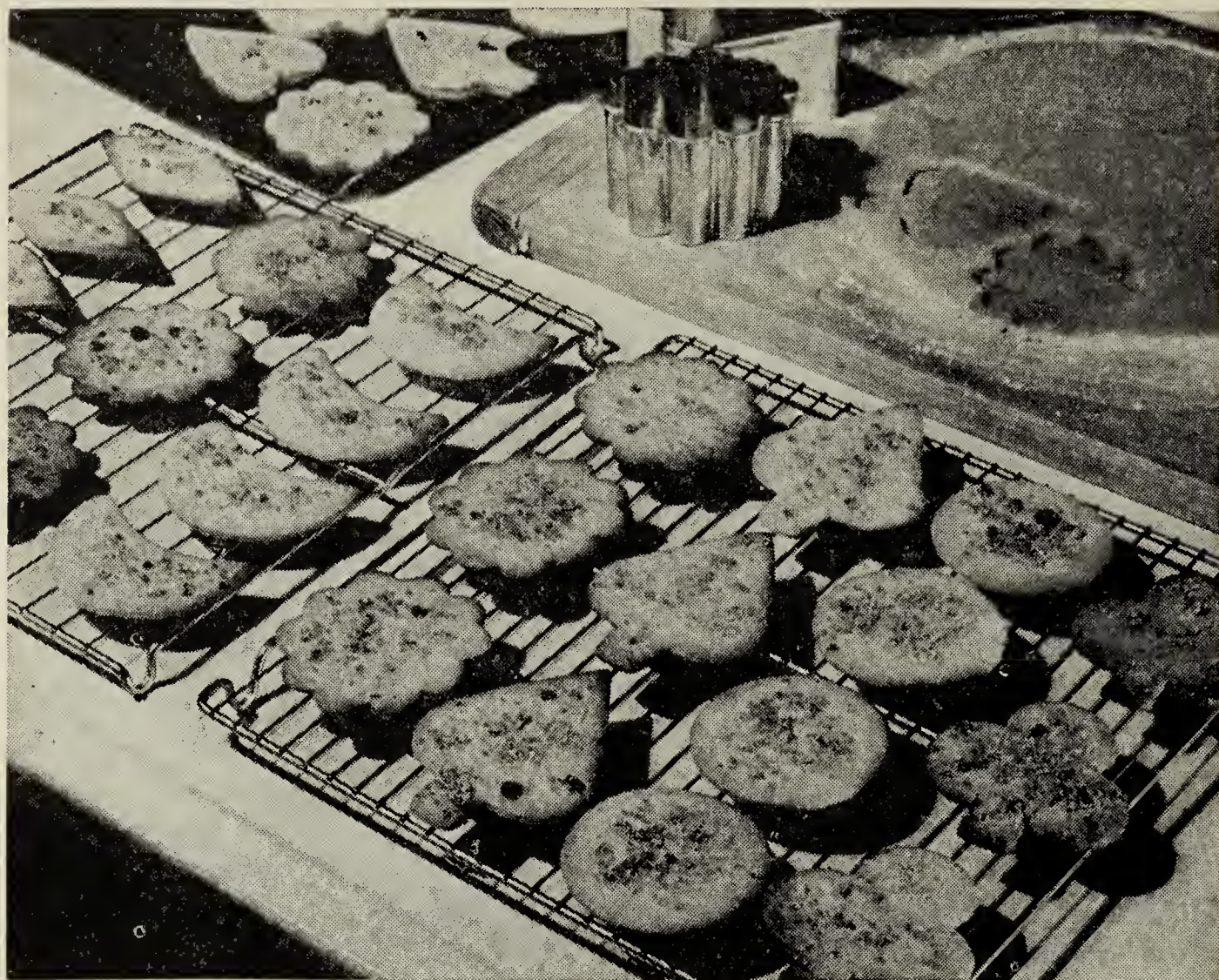
CREAM ½ c. shortening; add gradually ½ c. granulated sugar and ½ c. brown sugar; continue to cream until light and fluffy.

BEAT egg well and add with ¾ t. vanilla to the fat and sugar; mix well and gradually add flour and ½ c. nuts. Make into a roll about 1½ inches in diameter; roll in waxed paper or pack in a narrow pan lined with waxed paper, and chill for 5 or 6 hours.

TURN oven to 375° F. and lightly grease baking sheets.

CUT cooky dough ⅛ inch in thickness and bake in a moderate oven (375° F.) from 12 to 15 minutes. Cool on a rack.

SUGAR COOKIES



American Dairy Association

MAKES 40 COOKIES

2 c. sifted all-purpose flour
 $\frac{1}{2}$ t. salt
 1 t. baking powder
 1 t. vanilla

1 c. sugar
 $\frac{1}{2}$ c. butter or fortified margarine
 2 eggs, well beaten

SIFT flour, measure 2 c.; add $\frac{1}{2}$ t. salt and 1 t. baking powder; sift.
 CREAM $\frac{1}{2}$ c. butter or margarine; add gradually 1 c. sugar, and continue to cream until fluffy.
 BEAT 2 eggs well; add with 1 t. vanilla to sugar mixture; stir; add flour and mix until mixture rolls around in bowl.
 WRAP cookie dough in waxed paper and chill in the refrigerator.

When ready to bake cookies

GREASE baking sheets lightly and turn oven to 350° F.
 CUT a small piece of dough and place it on a slightly floured pastry board or cloth; with the rolling pin, lightly make one stroke; turn to other side and repeat; continue this procedure until dough is $\frac{1}{8}$ inch in thickness. This method prevents the dough from sticking and the use of too much flour.

CUT with cooky cutters. With spatula, lift cookies onto baking sheet; decorate and bake 10 to 12 minutes in a moderate oven (350° F.). Cool on rack.

NOTE: Sugar cookies may be varied by using cutters of assorted shapes or by decorating the tops with sugar, with sugar and cinnamon ($\frac{1}{4}$ c. sugar to $\frac{1}{2}$ t. cinnamon), with raisins in center sprinkled with sugar, with colored decoettes, or with chopped nuts.

ORANGE COOKIES

Use sugar cooky recipe, substituting 1 t. orange juice for 1 t. vanilla, and add grated rind of $\frac{1}{2}$ orange.

PEANUT BUTTER COOKIES

Use sugar cooky recipe, substituting $\frac{1}{2}$ c. peanut butter for $\frac{1}{2}$ c. butter or margarine.

LEMON COOKIES

Use sugar cooky recipe, and substitute $\frac{1}{2}$ t. lemon extract for 1 t. vanilla, and add 2 t. grated lemon rind.

FILLED COOKIES

MAKES 24 COOKIES

1 recipe sugar cookies	$\frac{1}{2}$ c. water
$\frac{1}{2}$ c. chopped raisins	1 t. candied orange peel, cut in
$\frac{1}{2}$ c. chopped dates	small pieces
$\frac{1}{4}$ c. chopped nuts	$\frac{1}{2}$ c. sugar

MIX $\frac{1}{2}$ c. raisins, $\frac{1}{2}$ c. dates, $\frac{1}{4}$ c. nuts, and 1 t. orange peel; add $\frac{1}{2}$ c. sugar and $\frac{1}{2}$ c. water; cook over low heat until thick. Cool.

TURN oven to 350° F., and lightly grease baking sheets.

USE round cooky cutter, $2\frac{1}{2}$ inches in diameter. Cut two circles for each cooky. The top circle will need an opening, made either by using a thimble for cutting a hole in the middle of the circle or by cutting small gashes with a knife or pricking with a fork.

PLACE 1 t. of filling on bottom circle and evenly spread to $\frac{1}{8}$ inch of edge; place top circle on filling and press edges with fingers or with the tines of a fork dipped in flour. With a spatula, place on baking sheet.

BRUSH with milk or slightly beaten egg white and bake in a moderate oven (350° F.) for 13 to 15 minutes. Cool on rack.

NOTE: You may use a three-inch cooky cutter to cut the dough, place the filling on one half the circle and fold the other half over, press the edges together, and prick the top with a fork.

GINGERSNAPS

MAKES ABOUT 5 DOZEN COOKIES

2 c. sifted all-purpose flour	$\frac{1}{8}$ t. allspice
$\frac{1}{2}$ t. soda	1 t. ginger
1 t. salt	$\frac{1}{2}$ t. cinnamon
6 T. shortening	$\frac{1}{8}$ t. cloves
$\frac{1}{2}$ c. sugar	$\frac{2}{3}$ c. molasses

- SIFT** flour, measure 2 c.; add $\frac{1}{2}$ c. sugar, $\frac{1}{2}$ t. soda, 1 t. salt, $\frac{1}{8}$ t. allspice, 1 t. ginger, $\frac{1}{2}$ t. cinnamon, and $\frac{1}{8}$ t. cloves; sift.
- HEAT** $\frac{2}{3}$ c. molasses to boiling; remove from heat, add 6 T. shortening, and stir until melted.
- TURN** oven to 350° F. and lightly grease baking sheets.
- ADD** flour to molasses; mix well; cover bowl and chill.
- ON** a slightly floured board or pastry cloth, roll small amounts of dough to $\frac{1}{8}$ inch in thickness; cut with cooky cutter and place on baking sheets; bake in moderate oven (350° F.) about 8 minutes. Cool on rack.
- NOTE:** Gingersnaps may be decorated with a white confectioners' frosting (page 241).

BROWNIES

MAKES 16 SQUARES

$\frac{3}{4}$ c. sifted cake flour	2 squares unsweetened chocolate
1 t. baking powder	1 c. sugar
$\frac{1}{3}$ c. shortening	2 eggs, well beaten
$\frac{1}{8}$ t. salt	1 t. vanilla
$\frac{1}{2}$ c. chopped walnuts	

- CUT** 2 squares chocolate, and place in top of double boiler; add $\frac{1}{3}$ c. shortening; melt, and cool.
- SIFT** flour, measure $\frac{3}{4}$ c.; add 1 t. baking powder and $\frac{1}{8}$ t. salt; sift.
- TURN** oven to 300° F. and lightly grease cake pan 8 x 8 x 2 inches.
- BEAT** 2 eggs well; add 1 c. sugar; mix thoroughly and then add the melted chocolate. Gradually add flour, $\frac{1}{2}$ c. nuts, and 1 t. vanilla; pour into greased pan and bake in a very slow oven (300° F.) for 30 minutes. Cool.
- CUT** into squares; remove from pan and store in an airtight container.
- NOTE:** Double-decker brownies are made by mixing batter as directed above with one exception. Divide batter, putting half in the bowl in which the eggs were beaten, and add vanilla. Add chocolate to other half of batter and place in bottom of pan; top with the light batter.

Recipes for tea

HOT TEA

MAKES 1 CUP

$\frac{1}{2}$ -1 t. tea

1 c. boiling water

FILL teapot with boiling water to warm pot. Drain.

PLACE $\frac{1}{2}$ to 1 t. tea in pot and pour 1 c. boiling water over it.

STEEP for 1 to 3 minutes.

STRAIN, and serve at once.

NOTE: Tea balls are very convenient. Tea does not need to be strained; just remove tea ball. The amount of tea used is determined by the strength of tea desired.

ICED TEA

SERVES 4

4 t. tea

4 c. boiling water

cracked ice

lemon wedges

BREW as for hot tea.

FILL tall glasses with cracked ice and pour the hot tea into the glasses.

SERVE with wedges of lemon, a sprig of mint, and sugar if desired.

CLASS ACTIVITIES

1. Compare the cost of shortenings in your stores.
2. Compare the cost of homemade cookies and bakery cookies in your community.
3. If possible, arrange for an exhibition (and tasting party) of cookies made from recipes from foreign countries. Your exhibition might include Lebkuchen, pfeffernuesse, zimmerstern, and lisakakor.
4. Make cookies for a special occasion such as Christmas, Halloween, or Washington's Birthday. Use fancy cutters and decorate the cookies with raisins or gumdrops.
5. Make cooky bars or squares such as brownies.
6. Make fancy cookies and pack a gift box.

FUN WITH FOOD AT HOME

1. Make a kind of cooky which is new to your family.
2. Collect basic recipes for drop cookies, rolled cookies, and refrigerator cookies, and two variations for each type.

3. Cakes with shortening, alias butter cakes

Cakes are divided into two types: those with shortening and those with no shortening. In this problem we shall study cakes made with fat, and at a later time we shall take up fat-free cakes. Cakes which contain shortening are frequently referred to as "butter cakes," but not because they always contain butter. In days prior to good margarines, bland lard, and hydrogenated vegetable fats, butter was always used for cake shortening, because lard, the only other cooking fat, was not agreeable in flavor and was too heavy for good cake-baking. Hence, the term, "butter cake," was truly descriptive. Cake recipes in old nineteenth-century cookbooks ask for generous amounts of butter, many of them requiring a whole pound to a cake. No wonder they came to be called "butter cakes"!

Ingredients for cakes made with shortening. The ingredients required for "butter cakes" are substantially the same as those for cookies. However, the ingredients are combined in different proportions so as to obtain the characteristic shape and texture of a cake.

CLASS PROJECT: A "BUTTER CAKE" WITH YELLOW BATTER.

Make a yellow batter cake from the basic recipe on page 237 and frost it with uncooked icing. This project will require two or three days, depending upon the length of your working period.

1. Study the general directions for making a cake by the conventional method, given in these pages and in the recipe.

2. Watch a demonstration of making a cake according to the basic recipe. Remember, this is called the cake method of combining ingredients.

3. Make a work schedule for the class period when you will bake a cake. Remember that a cake cannot be mixed one day and baked the next. If you have short periods, you must plan for oven watchers who will take out the cakes when they are done. While the cakes bake, watch a demonstration of making uncooked frosting and putting it on the demonstration cake made the day before. Cakes can be frosted and sampled the following day.

4. Be sure you know what you are going to do, and work rapidly. You should be able to mix the cake batter in 20 minutes.

5. Serve your cake as dessert with forks and other equipment required for a simple cover. Eat your cake with good manners.

6. Hold a cake clinic and discuss the success of your cake according to the standards on page 234. Include also a discussion of your own eating manners.

Shortening. Most modern cake recipes do not specify any particular kind of shortening, merely stating the amount of fat or shortening to be used. The choice of the fat rests with the cook, and she should be informed on the advantages of each type available. The selection of shortening for cakes depends upon the same considerations as for cookies. Many people prefer butter because of its flavor, but this is the most expensive type of shortening. Other people prefer margarine, which has a similar flavor and is less expensive. The hydrogenated vegetable fats are satisfactory shortening, but add no flavor to the cake. They are convenient to use because they can be kept on a shelf at room temperature, and are ready to cream without preliminary softening. Bland lard has the same advantages as the vegetable fats, but ordinary lard is not generally liked because of its flavor. Many cooks solve the shortening problem by using part butter or margarine and part vegetable fat or bland lard.

Sugar. Sweetness is a desirable characteristic of cake, but too much sugar will result in a coarse, crumbly texture and a crust that is crackled and gummy. Follow your recipe exactly, but if these undesirable char-

Light-batter layer cake with chocolate frosting is a favorite.

Swans Down Cake Flour



CLASS PROJECT: CHOCOLATE CUP CAKES WITH COOKED FROSTING.

Make chocolate cup cakes which will be used as refreshments for a school party or will be donated to a "bake" sale.

1. Study the recipe for cup cakes and frosting (made with egg whites) on pages 238 and 242.

2. Watch a demonstration of making the cup cakes and of frosting them with cooked icing.

3. Make your work schedule, including mixing, baking, "washing up," frosting, and judging. If you have short class periods, you will need two days.

acteristics appear, you might try using a little less sugar the next time you use the same recipe. If the sugar is not free from lumps, it should be sifted before measuring. Fine-grained sugar produces a finer-grained cake.

Flour. The most delicate and tender cakes are made with cake flour, but good cakes can also be made with all-purpose flour. Most recipes specify the kind of flour that should be used, but if it is not specified you should take it for granted that the recipe calls for enriched all-purpose flour. If you wish to use all-purpose flour instead of cake flour, you should reduce this amount by two level tablespoons per cup. If the recipe calls for all-purpose flour and you wish to use cake flour, add two tablespoons to the amount stated in the recipe.

All flour should be *sifted before it is measured*. A cup of flour which has been scooped out of the can without sifting contains more flour than a cupful of flour that has been sifted once. Thus, a cup of unsifted flour adds more flour to your cake than the recipe calls for. Too much flour causes the cake to hump up in the middle and to have a dry, bready texture.

Other ingredients. Eggs should be fresh and should be allowed to warm to room temperature, as more air can be beaten into them than when they are cold. The beaten eggs help to give lightness to the cake and, also, act as a binding agent.

Baking powder, soda, or a combination of cream of tartar and soda may be used as the leavening in butter cakes. Soda is used with sour milk, cream, or buttermilk. The amount of baking powder required varies with the type which is used and with the number of eggs used. The S-A-S (sodium aluminum phosphate) baking powders should be used in smaller quantities than the other baking powders. Proportions for ingredients are carefully worked out and tested in most



Ann Pillsbury, Pillsbury Mills Inc.

Frosted cup cakes are fun to make.

recipes, so it is not necessary for us to worry much about this problem. However, one must know what kind of baking powder is intended in each recipe. Experience will show you that with well-beaten eggs, 1 to 1½ teaspoons of baking powder to each cup of flour is adequate.

The liquid in cake batter is usually milk, although fruit juice or water may be used successfully.

General directions for mixing butter cakes. There are two general methods of procedure in combining cake ingredients, the cake method and the muffin method. A third method (page 453) can be used with an electric mixer.

The cake method of mixing batter is the usual one, and is sometimes called the conventional method. It might also be called the creaming method, because the first step consists of creaming the shortening and



Swans Down Cake Flour

Oiled paper cut to fit the bottom of the pan makes it easier to remove the cake from the pan.

sugar together. The cake method is the same general process which you used in making your cookies, except that not much liquid, if any, is used in cooky dough. Many cooking experts believe that best results are obtained by this method. The steps in the cake method are outlined briefly.

1. Cream shortening, sugar, and flavoring together. Remember that thorough creaming beats air bubbles into the mixture, thus adding lightness to the cake.

2. Beat egg yolks thoroughly and blend into mixture. This also adds lightness.

3. Mix all dry ingredients and sift together.

4. Add dry mixture to creamed mixture alternately with liquid. Add in small amounts and blend thoroughly after each addition.

5. Beat egg whites until stiff, but not dry, and fold into batter.

The muffin method of mixing cake ingredients is quicker but is not generally believed to produce equally good results. This is the method which you used when you made muffins.

1. Sift all dry ingredients together.

2. Combine liquids and beaten eggs.

3. Pour liquid mixture into dry mixture and beat to smooth batter.

4. Add melted shortening and beat into batter.

Tricks of the trade in cake-making. Every experienced cook learns quick and easy ways of doing things. Here are a few suggestions which may help you to work more rapidly and efficiently.

1. Always light the oven and set it at the proper temperature before beginning to mix the cake batter. This saves time and permits the cake to begin baking instantly.

2. To measure fat easily and accurately, fill the measuring cup with as much cold water as would be required to make one whole cupful if the fat were already in the cup. For example, if the recipe calls for $\frac{1}{2}$ cup of shortening, put $\frac{1}{2}$ cup of water into the cup, then put fat into the cup until the level of the water rises to the top of the cup. Pour off the water and then the fat is ready for the mixing bowl. If the recipe calls

CLASS PROJECT: CAKE AND COFFEE FOR REFRESHMENTS AT A PARTY.

Serve cake and coffee to a group of adults. This may be a faculty group, a parents group, or others who are having a meeting in your building. Choose cake recipes which are new to you. They should include gingerbread, spice cake, nut or date bread, and upside-down cake.

1. Watch a demonstration of the following: gingerbread by the muffin method; date or nut bread by the muffin method or cake method; spice cake made with sour milk; upside-down cake with pineapple, apricots, or cherries.

2. Watch the making of coffee by three methods: boiled, percolator, and dripolator. (Page 245.)

3. Choose the kind of cake and the kind of coffee which your group will make. These should differ so as to give variety to the refreshments which you will serve.

4. Make a working schedule which will fit your recipes. Remember that the coffee should be made just before it is to be served.

5. Plan an attractive table from which you will serve the refreshments.

6. After the party is over, ask a guest who was present to tell you the best points and the poorest about your refreshments and about the way in which they were served.

for $\frac{1}{4}$ cup of shortening, put $\frac{3}{4}$ cup of water into the cup, push fat into the cup until the water reaches the top level, and pour off. This method of measuring avoids pushing fat down into all the corners of a cup and scooping it out again.

3. Do not overstir or overbeat cake batters. It is time and energy ill-spent because overstirred cakes are tough. Too much stirring develops the gluten to an undesirable point. Probably, about 2 minutes is the most desirable amount of time for stirring butter cakes.

4. Grease the pans before beginning to mix the cake. If only the bottom of the pan is greased, the cake probably will have greater volume. Waxed paper, cut to fit the bottom of the pan, facilitates turning the cake out of the pan. The paper should be greased before the batter is turned onto it.

5. One measuring cup and one set of measuring spoons can be used without washing during the mixing process, if the cup is first used for the dry ingredient, then the fat, and then the liquid.

Oven techniques in cake-baking. Many a good cake has been ruined in the baking. Here are some hints which should help you to avoid baking failures.

1. Keep the oven temperature at the specified temperature. If the oven

does not have a temperature control built into it, procure a portable oven thermometer and regulate the oven accordingly.

2. The right temperature is tremendously important in good baking. In general, large cakes should be baked at a lower temperature than the small, thin ones. The type of cake and the nature of the ingredients also affect the most desirable temperature.

Small cup cakes are baked at slightly higher temperatures (375° F.) than the larger ones. Thin layers are baked at 375° F. and the thicker ones at 350° F. It is a good general rule to remember that smaller and thinner cakes should be baked at slightly higher temperatures than larger, thicker cakes of the same type. Any cake batter can be used for making cup cakes.

Cakes baked at the right temperature have no humps or hollows, and have a smooth, uncracked surface. The crust is tender, golden brown, and easily cut. The inside of the cake is light, fine-textured, and has an even grain. Cakes which are baked at too low a temperature are uneven, likely to have hollows, and often fall. The inside is coarse-textured, with a soggy layer at the bottom. Cakes which are baked at too high a temperature have humps and cracks on the top and are likely to be too well browned. The interior is heavy and compact.

The ovens on most modern ranges are equipped with temperature controls. This makes it very simple to maintain the correct temperature while you are baking a cake or other product. In case your oven does not have one of these regulators, try to get a portable oven thermometer which you can keep in the oven as a guide in controlling the heat.

3. Placement of the cake pans in the oven is important for good results. Correct arrangements are shown in the pictures on page 233. Notice that these placements provide for even circulation of heat around the pans, thus producing evenness of baking.

4. After the cake has been placed in the oven, do not open the door for at least 20 minutes. To do so may allow cool air to hit the cake, causing it to fall.

5. When you do look at the cake, close the door gently. One slam of the door may cause your cake to collapse!

6. Cakes can be tested for doneness in the following ways: (a) insert a toothpick or cake tester in the center of the cake. If it comes out clean, with no batter adhering to it, the cake is done. (b) Press the fingertip lightly on the center of the cake. If it springs back, showing no hollow, the cake is done. (c) When the edges of the cake pull slightly but definitely away from the edges of the pan, the cake is done.

THE OVEN MUST NOT BE OVERCROWDED

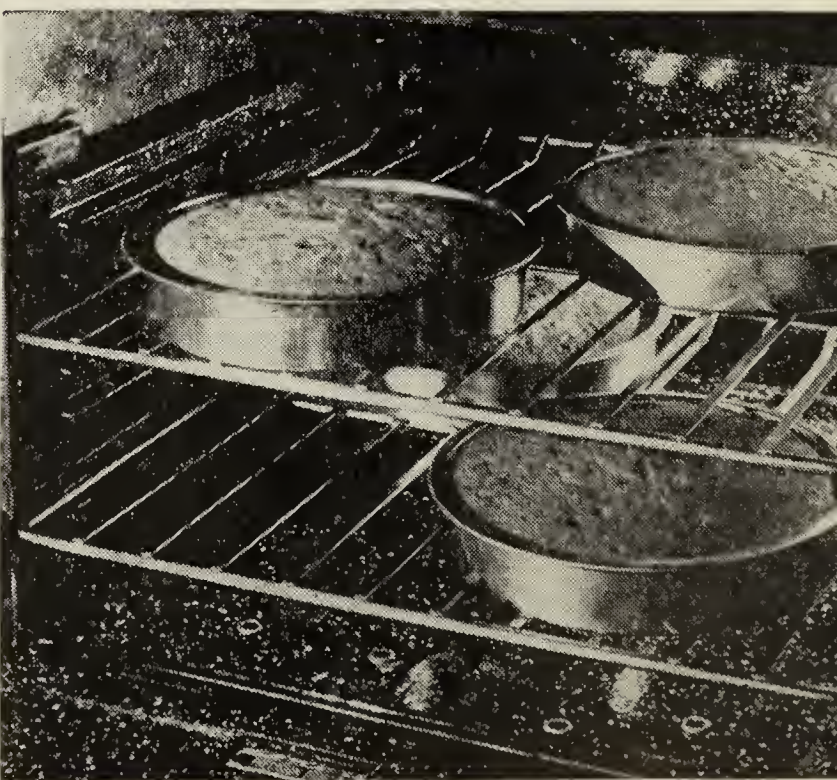
When baking a two-layer cake, place both pans on one shelf as near the center of the oven as possible. Pans should never touch each other nor the walls of the oven.



When baking a three-layer cake, arrange two racks in the oven so that the first rack is approximately one-third of the way up from the bottom of the oven and so that the top rack is approximately one-third of the way down from the top of the oven. Then place two of the layers diagonally on the bottom shelf; place the third layer alone on the second shelf in such a way that it is not directly above either of the two layers below it.



When baking a four-layer cake, arrange the two racks as described for a three-layer cake. Then arrange two of the layers diagonally on the bottom shelf and two on the top shelf in such a way that as small a portion as possible of the cakes on the lower rack will be covered by the two on the upper rack.



Robertshaw Thermostat Company

7. Cooling the cake in the correct fashion is important for the success of the finished product. Place the cake, right side up, on a cooling rack. This allows the air to circulate beneath the cake, preventing a moist bottom. To remove the cake from the tin, loosen the edges with a knife. Then invert it on a rack or plate, and tap gently.

Standards for good butter cake. Consider the following points when you judge the quality of a butter cake.

1. Is the cake symmetrical, with a very slightly curving top? Humps, hollows, and lopsided effects are undesirable.

2. Is the surface smooth, and neither sticky nor crusty?

3. Is the crust a light, golden brown (unless it is a dark cake)?

4. Is the texture of the interior tender, moist, and velvety? Cakes which are overbaked are dry and appear to be stale.

5. Is the grain fine and even? Tunnels, large uneven holes, or coarseness are undesirable.

6. Is the flavor well blended and pleasing? It should not taste strongly of any one ingredient.

Butter cake troubles and their causes. If your cake is not perfect, the following list¹ of reasons for undesirable qualities may help you to correct the difficulty. It is not desirable to memorize such a long list, but if you read it over thoughtfully it may help you to avoid mistakes.

When cake is undersized, the cause may be:

Not enough leavening. Use type called for; measure the exact amount.

Mixture baked in too-large pan.

Oven too hot for proper rising.

When cake falls, the cause may be:

Too much shortening.

Too much leavening.

Too much liquid.

Too much sugar.

Insufficient or too-slow baking.

When crust is hard, the cause may be:

Oven too hot.

Cake baked too long.

When cake humps on top, the cause may be:

Oven too hot at first of baking.

Too much flour. Use kind and amount called for.

Not enough liquid in the mixture.

When cake rises higher on one side, the cause may be:

Uneven heat in oven.

Oven rack not level.

Stiff batter spread unevenly in pan.

Use of warped pan.

When cake runs over pan, the cause may be:

Too much batter for size of pan.

Oven not hot enough.

Too much leavening.

Too much sugar.

¹ *Baking Secrets*, published by General Foods Corporation. Pp. 33-34-35, 1944.

When cake burns, the cause may be:

Uneven heat in oven.

Oven too full for right circulation of heat.

Oven too hot.

Cake baked too near sides of oven.

When crust is too light in color, the cause may be:

Oven not hot enough, especially in last baking quarter.

Not enough sugar.

Not enough shortening.

Not enough leavening.

Not enough batter to fill the pan properly.

When crust is sticky, the cause may be:

Too much sugar.

Insufficient or too-slow baking.

When crust is soggy, or doughy, the cause may be:

Cake allowed to steam while cooling.

Insufficient or too-slow baking.

When cake has coarse grain, the cause may be:

Too much leavening.

Insufficient creaming or mixing.

Use of too-soft shortening.

Use of wrong kind of flour.

Oven too slow.

When cake is dry, the cause may be:

Too much flour.

Too much leavening (cake crumbly).

Not enough shortening.

Not enough liquid.

Not enough sugar.

Overbeaten eggwhites (too stiff and dry).

Substitution of cocoa for chocolate

without addition of more shortening.

Cake overbaked or baked too long at too-low temperature.

When cake has soggy layer or streak at bottom, the cause may be:

Undermixing of ingredients.

Shortening too soft for creaming properly.

Not enough leavening.

In egg-yolk cakes, underbeaten yolks.

Too much liquid.

When cake sticks to pan, or crust rolls in balls, the cause may be:

Pan not properly prepared.

Cake left in pan too long after baking.

When cake is tough, the cause may be:

Not enough shortening.

Not enough sugar.

Final overmixing or overbeating of batter.

Too much flour.

Oven too hot (crust bakes hard).

Cake baked too long.

When cake is heavy, the cause may be:

Final overmixing or overbeating of batter.

Too much shortening.

Not enough sugar.

Too much liquid.

In egg-yolk cakes, underbeaten yolks.

Oven too hot or too slow.

When cake falls apart, the cause may be:

Too much shortening, leavening, or sugar.

Careless removal of cake from pan.

Cake removed from pan too soon.

Insufficient or too-slow baking.



Cereal Institute, Inc.

Sandwiches made from date-nut bread, banana bread, or date bread add extra goodness both in flavor and in food values.

Variations in butter cake recipes. There are many delightful ways of varying the butter cake recipe. Variety can be obtained by the use of tasteful flavors such as vanilla, chocolate, lemon, maple, molasses, butterscotch, and spices. Still further variety is secured by the addition of fruit to the batter, as, for example, applesauce, bananas, pineapple, or dates.

Gingerbread, in spite of its name, really belongs to the cake family. It contains sugar and molasses in sufficient quantity to make it sweet and enough shortening to give it the consistency of cake rather than bread. Either the cake method or the muffin method of mixing the batter may be specified for gingerbread recipes.

Nut, date, and other fruit breads often contain so much sugar and shortening that they are more cakelike than breadlike. Some of these recipes are mixed by the cake method and some by the muffin method.

Other variations in cake recipes are achieved by the addition of special ingredients. Fruit cake is well loaded with nuts, fruit, and spices to make a very rich and heavy cake. Some cakes are different because of special treatments in combining the ingredients. Upside-down cake is made by

pouring the batter on top of a fruit and sirup mixture. "Krum kucken," a Pennsylvania Dutch recipe, is made by working the shortening, sugar, flour, and baking powder together into a crumbly consistency. Half the crumbs are saved and scattered over the top of the batter before it is baked. Old-fashioned pound cake was so named because the recipe called for a pound of butter, a pound of sugar, a pound of flour, a pound of raisins, and well-beaten egg whites and egg yolks from nine eggs. All this was beaten well for twenty minutes and baked in a slow oven. Since the recipe included no leavening, other than the beaten eggs, the texture was very fine.

Finally, variations in cakes are secured by frostings and fillings. There are almost as many variations in these as in the cakes themselves.

Frostings and fillings for your cakes. Some folks may think that a good cake needs no frosting, but others would rather believe that a good cake deserves good frosting. A thick, beautiful frosting on a big, lovely cake is glamorous indeed. Not to mention its taste appeal!

Recipes for butter cakes

YELLOW BUTTER CAKE

- | | |
|------------------------|---------------------------------------|
| 2 c. sifted cake flour | 1/2 c. shortening |
| 4 t. baking powder | 3/4 c. milk |
| 1/4 t. salt | 3 egg yolks, well beaten |
| 1 c. sugar | 1 t. vanilla or 1/2 t. almond extract |
- SIFT** flour, measure 2 c.; add 1/4 t. salt and 4 t. baking powder; sift.
- CREAM** 1/2 c. shortening; add 1 t. flavoring; gradually add 1 c. sugar and continue to cream until light and fluffy.
- GREASE** cake pan, 8 x 8 x 2 inches, lightly and fit waxed paper in bottom if desired.
- TURN** oven to 350° F.
- BEAT** 3 egg yolks well; add to sugar mixture; beat well; add alternately flour and 3/4 c. milk; beat after each addition until batter is smooth. Pour into cake pan and bake in a moderate oven (350° F.) 30 to 35 minutes. Cool on rack.
- COVER** with chocolate cream frosting (page 242).
- NOTE:** A layer cake is made by doubling the recipe and using two cake pans of the same size.

STANDARD BUTTER CAKE

(Electric mixer)

- | | |
|------------------------|-----------------|
| 3 c. sifted cake flour | 1 t. salt |
| 3 t. baking powder | 1 c. milk, cold |

1 c. shortening, cold
2 c. sugar

4 eggs
1 t. vanilla

- SIFT flour, measure 3 c.; add 1 t. salt and 3 t. baking powder; sift.
TURN oven to 375° F. Grease lightly two cake pans, 8 x 8 x 2 inches.
CREAM 1 c. shortening, 2 c. sugar, 4 eggs, and 1 t. vanilla with an electric mixer for 2 or 3 minutes at medium speed.
ADD flour and 1 c. milk; beat with mixer at low speed for 1 minute. With the aid of a rubber spatula, work flour and batter away from the sides of the bowl and toss toward beaters.
TURN mixer to high speed; beat for two minutes; remove batter from beaters.
POUR batter into pans and bake in a moderate oven (375° F.) for 25 to 40 minutes. Cool on cake rack.
FROST cakes either as for a single cake or as a layer cake.

CHOCOLATE CUP CAKES

1¼ c. sifted cake flour
1½ t. baking powder
¼ t. salt
½ c. shortening
1 c. sugar
½ t. vanilla

½ c. sour milk
2 egg yolks
2 egg whites, stiffly beaten
¼ c. cocoa
½ t. soda
¼ c. boiling water

- MIX ¼ c. cocoa and ½ t. soda together; add ¼ c. boiling water; stir and cool.
GREASE muffin tins lightly or use paper-cup linings.
SIFT flour, measure 1¼ c.; add ¼ t. salt and 1½ t. baking powder; sift.
CREAM ½ c. shortening; add ½ t. vanilla and gradually add 1 c. sugar; cream until fluffy; add 2 egg yolks and beat well.
TURN oven to 375° F. Beat egg whites until stiff.
ADD cocoa to sugar and shortening; add flour and ½ c. milk alternately; mix well.
FOLD in egg whites; with a tablespoon, fill muffin pans half full and bake in a moderate oven (375° F.) for 15 to 25 minutes. Cool on cake rack.
FROST with magic frosting (page 242).
NOTE: This recipe will make 1 layer cake 8 x 8 x 2 inches.
Muffin pans filled half full will make cakes round on top.

SPICE CAKE

2 c. sifted cake flour
4 t. baking powder
½ t. salt

¼ t. cloves
1 t. cinnamon
⅓ c. shortening

- | | |
|---------------------------|---|
| $\frac{1}{4}$ t. nutmeg | $\frac{3}{4}$ c. brown sugar, firmly packed |
| $\frac{1}{4}$ t. mace | 1 egg, well beaten |
| $\frac{1}{2}$ t. allspice | $\frac{3}{4}$ c. milk |
- SIFT flour, measure 2 c.; add 4 t. baking powder, $\frac{1}{2}$ t. salt, $\frac{1}{4}$ t. nutmeg, $\frac{1}{4}$ t. mace, $\frac{1}{2}$ t. allspice, $\frac{1}{4}$ t. cloves, and 1 t. cinnamon; sift.
- GREASE cake pan, 8 x 8 x 2 inches, lightly, or line bottom of pan with waxed paper.
- TURN oven to 375° F.
- CREAM $\frac{1}{3}$ c. shortening; gradually add $\frac{3}{4}$ c. sugar and cream until light and fluffy.
- BEAT egg well and add to sugar and shortening; add flour and $\frac{3}{4}$ c. milk alternately; beat well after each addition until smooth.
- POUR into pan and bake in a moderate oven (375° F.) for 25 to 40 minutes. Cool on cake rack.

LEBKUCHEN

- | | |
|---|--|
| $2\frac{1}{2}$ c. sifted all-purpose flour | $\frac{1}{2}$ c. cold coffee |
| $\frac{1}{2}$ t. salt | $\frac{1}{2}$ c. molasses |
| $\frac{1}{2}$ t. soda | 1 egg |
| $\frac{3}{4}$ t. cinnamon | $\frac{3}{4}$ c. chopped nuts |
| $\frac{1}{4}$ t. cloves | $\frac{1}{2}$ c. chopped citron |
| $\frac{1}{2}$ t. allspice | $\frac{1}{2}$ c. chopped candied orange peel |
| 1 T. cocoa | $\frac{1}{4}$ c. chopped candied lemon peel |
| $\frac{1}{4}$ c. shortening | $\frac{1}{4}$ c. chopped candied cherries |
| $\frac{1}{2}$ c. brown sugar, firmly packed | |
- PREPARE $\frac{3}{4}$ c. nuts, $\frac{1}{2}$ c. citron, $\frac{1}{2}$ c. orange peel, $\frac{1}{4}$ c. lemon peel, and $\frac{1}{4}$ c. cherries.
- GREASE a baking pan, 10 x 15 x 1 inches.
- SIFT flour, measure $2\frac{1}{2}$ c.; add $\frac{1}{2}$ t. salt, $\frac{1}{2}$ t. soda, $\frac{3}{4}$ t. cinnamon, $\frac{1}{4}$ t. cloves, $\frac{1}{2}$ t. allspice, and 1 T. cocoa; sift.
- CREAM $\frac{1}{4}$ c. shortening; add $\frac{1}{2}$ c. sugar gradually, beating well after each addition; add unbeaten egg and $\frac{1}{2}$ c. molasses; mix well.
- TURN oven to 350° F.
- STIR nuts and fruit into first mixture; add flour and $\frac{1}{2}$ c. coffee alternately; turn into pan and bake in a moderate oven (350° F.) 20 to 30 minutes, or until firm to the touch. Cool.
- SPREAD cake with a frosting made from stirring $1\frac{1}{2}$ to 2 T. lemon juice into 1 c. sifted confectioners' sugar. Add just enough lemon juice to make the frosting spread nicely.
- CUT cake in 2-inch squares and store in a tightly covered tin box, separating each layer with waxed paper.
- NOTE: Make at least one week before using. If Lebkuchen is frosted as needed the icing will be nicer.

COTTAGE PUDDING

SERVES 4-6

- | | |
|----------------------------------|-----------------------|
| 1 c. plus 2 T. all-purpose flour | 2 T. shortening |
| 2 t. baking powder | $\frac{1}{2}$ c. milk |
| $\frac{1}{4}$ t. salt | 1 egg, well beaten |
| $\frac{1}{3}$ c. sugar | F. G. nutmeg |
- SIFT flour, measure 1 c. plus 2 T.; add 2 t. baking powder and $\frac{1}{4}$ t. salt; sift.
- CREAM 2 T. shortening and gradually add $\frac{1}{3}$ c. sugar.
- TURN oven to 350° F., and grease a shallow baking dish or muffin pans.
- BEAT egg well; add to shortening and sugar; add flour and $\frac{1}{2}$ c. milk alternately; mix.
- POUR mixture into baking dish or muffin pans; bake in a moderate oven (350° F.) for 20 to 35 minutes, depending on size.
- SERVE hot with lemon sauce (page 256) or foamy sauce, or crushed sweetened berries.

FOAMY SAUCE

MAKES ABOUT $\frac{3}{4}$ CUP

- | | |
|--|--------------------------------|
| 1 c. sifted confectioners' sugar | F. G. salt |
| $\frac{1}{3}$ c. butter or fortified margarine | $\frac{3}{4}$ t. vanilla |
| 1 egg, well beaten | $\frac{1}{2}$ t. lemon extract |
- PLACE $\frac{1}{3}$ c. butter or margarine in the top of a double boiler and cream until soft. Add 1 c. sugar and F. G. salt.
- BEAT egg well and add to above mixture.
- COOK mixture over boiling water for 3 or 4 minutes, beating constantly with a rotary beater. Remove from heat and add $\frac{3}{4}$ t. vanilla and $\frac{1}{2}$ t. lemon extract.
- SERVE hot or cold with puddings.

APRICOT UPSIDE-DOWN CAKE

SERVES 8-10

Topping

- | | |
|--|---|
| $1\frac{1}{2}$ c. cooked, sweetened dried apricots | $\frac{1}{3}$ c. brown sugar, firmly packed |
| 2 T. water | 3 T. butter or fortified margarine |
| | $\frac{1}{2}$ t. cinnamon |

Cake

- | | |
|-------------------------------------|-----------------------|
| $1\frac{3}{4}$ c. sifted cake flour | 1 c. sugar |
| $2\frac{1}{2}$ t. baking powder | $\frac{2}{3}$ c. milk |
| $\frac{1}{2}$ t. salt | 2 eggs |
| $\frac{1}{2}$ c. shortening | 1 t. vanilla |

TURN oven to 375° F.

COMBINE $\frac{1}{3}$ c. sugar, 3 T. butter or margarine, $\frac{1}{2}$ t. cinnamon, and 2 T. water in a skillet about 9 x 2 inches; place in a moderate oven until butter is melted; remove from oven, evenly distribute sugar mixture in bottom of skillet, and place apricots uniformly over sirup.

SIFT flour, measure $1\frac{3}{4}$ c.; add $\frac{1}{2}$ t. salt and $2\frac{1}{2}$ t. baking powder; sift.

CREAM $\frac{1}{2}$ c. shortening; gradually add 1 c. sugar and 1 t. vanilla; beat until fluffy.

BEAT 2 eggs well and add to sugar and shortening; add flour and $\frac{2}{3}$ c. milk alternately, beating well after each addition.

POUR mixture evenly over apricots and bake in a moderate oven (375° F.) for 40 minutes.

BEFORE removing from pan, run a spatula around the edges of cake and invert skillet on a large plate.

NOTE: Serve either warm or cold. The cake may be topped with whipped cream.

Recipes for frostings

CONFECTIONERS' FROSTING

$1\frac{1}{2}$ c. sifted confectioners' sugar $1\frac{1}{2}$ T. boiling water
 1 t. butter or fortified margarine $\frac{1}{2}$ t. vanilla

PLACE in a bowl 1 t. butter or margarine; add $1\frac{1}{2}$ T. boiling water and stir until butter is melted.

ADD $\frac{1}{2}$ t. vanilla; gradually add $1\frac{1}{2}$ c. sugar and beat until smooth. Add more boiling water, if necessary, drop by drop and beat to produce a smooth-spreading frosting.

BUTTER CREAM FROSTING

1 c. sifted confectioners' sugar $\frac{1}{2}$ t. vanilla
 2 T. butter or fortified margarine $\frac{1}{4}$ t. salt
 1 T. cream or top milk

CREAM 2 T. butter or margarine until soft and smooth; add 1 c. sugar slowly, creaming after each addition. Add $\frac{1}{4}$ t. salt and $\frac{1}{2}$ t. vanilla; stir. Gradually work in just enough cream to make a smooth-spreading frosting.

NOTE: This recipe makes enough to frost a one-layer cake which is 8 x 8 x 2 inches.

ORANGE CREAM FROSTING

Use the recipe for butter cream frosting, omitting 1 T. cream and $\frac{1}{2}$ t. vanilla and substituting 1 T. orange juice and $\frac{1}{2}$ t. grated orange rind.

CHOCOLATE CREAM FROSTING

Use the recipe for butter cream frosting, omitting 1 T. cream and substituting $\frac{1}{2}$ square of bitter chocolate, melted and cooled.

MOCHA FROSTING

1 egg white	2 T. cold water
$\frac{1}{2}$ c. brown sugar, firmly packed	$\frac{1}{3}$ c. almonds, blanched and sliced
F. G. salt	$\frac{1}{2}$ t. vanilla

PREPARE $\frac{1}{3}$ c. almonds.

PLACE in the top of a double boiler the egg white, $\frac{1}{2}$ c. brown sugar, F. G. salt, and 2 T. water; beat with a dover beater until well mixed. Place over boiling water and beat constantly for 7 minutes or until frosting will hold a peak.

REMOVE from heat; add $\frac{1}{2}$ t. vanilla and beat until thick enough to spread on cake. Carefully spread on top of cake. Sprinkle with sliced almonds.

NOTE: If edges of cake are to be covered, start with the top edge first and cover with a thin coating, being careful not to get crumbs in the icing. Use long strokes and work quickly. Pile frosting on center of cake and swirl to edges and back, thus making ridges rather than a smooth surface.

COCOA FROSTING

2 c. sifted confectioners' sugar	1 T. melted butter or fortified
$\frac{1}{3}$ c. cocoa	margarine
$\frac{1}{4}$ t. salt	3 T. hot milk
$\frac{1}{2}$ t. vanilla	

SIFT 2 c. sugar, $\frac{1}{3}$ c. cocoa, and $\frac{1}{4}$ t. salt together.

MELT 1 T. butter or margarine in 3 T. hot milk; add $\frac{1}{2}$ t. vanilla, and slowly add sugar mixture. Beat until the frosting is the right consistency to spread.

MAGIC FROSTING

(Electric beater)

1 c. sugar	$\frac{1}{4}$ t. cream of tartar
5 T. cold water	$\frac{1}{4}$ t. salt
2 egg whites	1 t. vanilla

MIX 1 c. sugar, $\frac{1}{4}$ t. salt, $\frac{1}{4}$ t. cream of tartar, and 5 T. water in a saucepan. Stir and bring to a full rolling boil over a moderate flame.

PLACE 2 egg whites in the small mixer bowl. Do not beat until sirup is cooked.

- POUR** sirup slowly over egg whites while beating at high speed until all sirup has been added; reduce speed to medium; add 1 t. vanilla and beat until mixture is of a spreading consistency.
- NOTE:** This frosting remains moist but never gets hard. The recipe makes enough to ice a two-layer cake.

Recipes for tea breads

GINGERBREAD

- | | |
|---|----------------------------------|
| 2 $\frac{1}{4}$ c. sifted all-purpose flour | 1 $\frac{1}{8}$ t. allspice |
| 1 $\frac{1}{2}$ t. salt | 1 $\frac{1}{8}$ t. cloves |
| 1 $\frac{1}{2}$ t. soda | 1 $\frac{1}{3}$ c. shortening |
| 1 t. ginger | 1 c. molasses |
| 1 t. cinnamon | 2 $\frac{2}{3}$ c. boiling water |
- SIFT** flour, measure 2 $\frac{1}{4}$ c.; add 1 $\frac{1}{2}$ t. salt, 1 $\frac{1}{2}$ t. soda, 1 t. ginger, 1 t. cinnamon, 1 $\frac{1}{8}$ t. allspice, and 1 $\frac{1}{8}$ t. cloves; sift.
- TURN** oven to 350° F. and grease cake pan, 8 x 8 x 2 inches.
- ADD** 1 $\frac{1}{3}$ c. shortening to 2 $\frac{2}{3}$ c. boiling water; add 1 c. molasses and stir. Add sifted flour mixture and beat vigorously. Pour into pan and bake in a moderate oven (350° F.) 35 to 40 minutes. If baked in muffin pans, 20 to 30 minutes is required in a moderate oven (350° F.).

CINNAMON FLUFF

Topping

- | | |
|------------------------------------|-----------------------------|
| 2 T. butter or fortified margarine | 1 $\frac{1}{2}$ T. flour |
| 4 T. sugar | 1 $\frac{1}{2}$ t. cinnamon |

Cake

- | | |
|-------------------------------|--------------------|
| 2 c. sifted all-purpose flour | 4 T. shortening |
| 4 t. baking powder | 1 egg, well beaten |
| 1 $\frac{1}{2}$ t. salt | 1 c. milk |
| 1 $\frac{1}{2}$ c. sugar | |
- GREASE** lightly a cake pan, 8 x 8 x 2 inches.
- MAKE** topping by mixing 1 $\frac{1}{2}$ T. flour, 4 T. sugar, and 1 $\frac{1}{2}$ t. cinnamon together and blending 2 T. butter or margarine until crumbly.
- SIFT** flour, measure 2 c.; add 4 t. baking powder and 1 $\frac{1}{2}$ t. salt; sift.
- TURN** oven to 350° F.
- CREAM** 4 T. shortening; add 1 $\frac{1}{2}$ c. sugar gradually and continue to cream until well blended. Add beaten egg and beat until fluffy; add flour and 1 c. milk alternately; beat until smooth.

POUR into greased pan and sprinkle topping over batter; bake in a moderate oven (350° F.) from 40 to 45 minutes.

CUT into squares and serve hot.

DATE BREAD

2 c. sifted all-purpose flour	1 egg, well beaten
$\frac{1}{4}$ t. salt	1 c. dates, quartered
$\frac{3}{4}$ c. sugar	1 c. chopped nuts
1 t. soda	1 c. boiling water

STONE and quarter 1 c. dates; cover with 1 c. boiling water. Cool.

PREPARE 1 c. nut meats; grease bread pan. Turn oven to 350° F.

SIFT flour, measure 2-c.; add $\frac{3}{4}$ c. sugar, $\frac{1}{4}$ t. salt, and 1 t. soda; sift. Add nuts.

BEAT egg well; add to cool dates; add flour and mix well. Pour into greased pan and bake in a moderate oven (350° F.) for 1 hour. Turn on cake cooler to cool.

NOTE: Day-old date bread will cut more easily than that which is freshly baked. It makes excellent sandwiches with butter or cream cheese filling.

DATE AND NUT BREAD

$\frac{3}{4}$ c. sifted whole-wheat flour	$\frac{1}{4}$ c. brown sugar, firmly packed
$\frac{3}{4}$ c. sifted white flour	$\frac{1}{3}$ c. molasses
$2\frac{1}{2}$ t. baking powder	$\frac{3}{4}$ c. milk
$\frac{3}{4}$ t. salt	$\frac{1}{2}$ c. dates, cut in small pieces
$\frac{1}{4}$ t. soda	$\frac{1}{2}$ c. nuts, chopped

GREASE lightly one bread pan.

SIFT flour, measure $\frac{3}{4}$ c. whole-wheat and $\frac{3}{4}$ c. white; add $2\frac{1}{2}$ t. baking powder, $\frac{1}{4}$ t. soda, and $\frac{3}{4}$ t. salt; sift into a large bowl.

TURN oven to 350° F.

ADD $\frac{1}{2}$ c. nuts and $\frac{1}{2}$ c. dates to flour mixture.

MIX $\frac{3}{4}$ c. milk and $\frac{1}{3}$ c. molasses together and add to flour mixture; pour into pan and let stand for 20 minutes.

BAKE in a moderate oven (350° F.) for 1 hour. Turn on cake rack to cool. Wrap in waxed paper until ready to use.

BANANA TEA BREAD

$1\frac{3}{4}$ c. sifted all-purpose flour	$\frac{1}{3}$ c. shortening
2 t. baking powder	$\frac{2}{3}$ c. sugar
$\frac{1}{4}$ t. soda	1 c. mashed bananas, about 2 or 3
$\frac{1}{2}$ t. salt	2 eggs, well beaten

- SIFT** flour and measure $1\frac{3}{4}$ c.; add 2 t. baking powder, $\frac{1}{4}$ t. soda, and $\frac{1}{2}$ t. salt; sift.
- CREAM** $\frac{1}{3}$ c. shortening well and gradually add $\frac{2}{3}$ c. sugar; beat until light and fluffy.
- GREASE** bread pan. Turn oven to 350° F.
- REMOVE** skin and rough covering from bananas; mash.
- BEAT** 2 eggs well and add to shortening and sugar. Add flour and 1 c. bananas alternately, and beat well after each addition. Pour into bread pan and bake 60 to 70 minutes in a moderate oven (350° F.)

Recipes for coffee

Brewing coffee at home. Everyone should want to know how to brew coffee properly. Whatever type of coffee maker you use, whether it be vacuum, drip, percolator, or picnic, there are a few simple rules you must follow if you want *good* coffee.

1. *Measure coffee and water accurately.* Use 1 National Coffee Association's Standard Measure of coffee (or its equivalent, 2 level tablespoons) to each 6 ounces of water ($\frac{3}{4}$ of a standard measuring cup).

2. *Use fresh water for making coffee.* For best results, start with freshly drawn cold water. Water that has been preheated or drawn from the hot water faucet may impart an undesirable taste to the brew.

3. *Serve coffee as soon as possible after brewing.* If necessary to let brewed coffee stand any length of time, hold at serving temperature by placing pot in pan of hot water or over very low heat on asbestos pad. Keep the coffee hot but do not boil. Coffee that has cooled cannot be reheated without loss of flavor.

4. *For best results always brew coffee at full capacity of the coffee maker.*

5. *Consistent timing is important.* After you find the exact timing to secure the results desired with your method of coffee-making, stick to it in order to get uniform results.

6. *Never boil coffee.*

7. *Never re-use coffee grounds.*



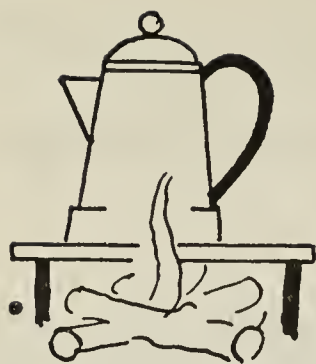
Vacuum



Drip



Percolator



National Coffee Association

Picnic style

8. *Never allow cloth filters to become dry. Keep immersed in cold water. Never use soap in washing cloth filters.*

9. *Keep coffee maker immaculately clean. Wash thoroughly after each use and rinse with clear hot water.*

10. *Always scald coffee maker before using.*

CLASS ACTIVITIES

1. What is your favorite kind of butter cake? Compare preferences with other members of the class. Have you learned to like a kind of cake which was unknown to you before your study of this unit? Discuss the varieties of cake which are most popular in your group.

2. Can you understand a cake recipe and evaluate it merely by reading it? For example, can you tell the difference between a hot-bread recipe and a cake recipe by reading the ingredients and their proportions? Ask your teacher to list the ingredients (not the mixing directions) for some quick breads and some cake recipes which you do not know. Can you classify them correctly as quick breads or cakes?

3. Compare the costs and qualities of bakery cakes, cakes made from semi-prepared mixes, and homemade cakes.

4. "That takes the cake" is an expression often heard. What does it mean and how do you think it might have originated?

5. Can any members of the class bring cake recipes from other countries?

6. Hold a cake contest. Offer ribbons or other honors for the best butter cakes baked at home.

7. Visit a good bakery. Perhaps the baker will let you watch while he decorates a birthday cake or wedding cake.

FUN WITH FOOD AT HOME

1. Bake a kind of butter cake which is new to your family. Report your success.

2. Bake a birthday cake for a member of your family or a friend.

3. Add a basic recipe for yellow batter cake to your collection, and also three variations.

4. Have a "kitchen party" or "cup-cake party" in your own home kitchen. You might have the cup cakes already baked and let the party fun consist of frosting and decorating the cakes. Nuts, cherries, and other decorations can be used and a prize offered for the most beautiful cup cake.

4. *Pies are popular!*

Among all the delectable desserts known to the American table, pie is the most popular. In several polls conducted by restaurant keepers, the results have always been the same—apple pie! This is somewhat surprising when we know that commercially baked pies seldom measure up to home standards. The implication is clear: everyone who pretends to know anything about cookery should know how to make a good apple pie. In learning how to make one, you will also learn how to make other kinds of good pastry.

Selection of ingredients for pie crust. Only four ingredients are required for plain pastry: flour, fat, salt, and water. Our special problem here is the selection of the right type in each case.

Flour used for pie crust should not have a strong gluten content because of the tendency of gluten to toughen the product. Cake, pastry, and all-purpose or “family” flour can be used successfully to make good pie crust, but bread flour should be avoided. Cake and pastry flour give a more tender crust but are more expensive and must be used in larger quantities.

Shortening for pie crust may be any of the fats which are used in cake-making. However, butter and margarine are seldom used in pastry because of the expense and, also, because butter flavor is not generally regarded as important in pie crust. Many people prefer a good grade of leaf lard for pastry shortening, and others prefer the flavorless vegetable fats or bland lard. Second grade lards are not desirable because of their strong flavor. A good general rule for pastry is $\frac{1}{3}$ cup of shortening to one cup of flour. Whatever type of shortening is used, it should be solid and cold.

Water used for making pie dough, depending upon the method used, should be either very cold or very hot. The usual method of making pie crust, favored by most cooks, is most successful when the water is ice cold.

Methods of mixing pie crust. The *conventional method* of mixing pie dough consists of two main steps.

1. Cut the shortening into the flour. Put the flour and salt (mixed) into a bowl and cut the fat into it, using a pastry blender or two knives. Remember that the fat should be cold and solid. *Work quickly and not too long.* The mixture is right when the lumps of fat are about the size of small peas. When the mixture has reached this stage, *stop*.

CLASS PROJECT: A ONE-CRUST AND A DOUBLE-CRUST PIE SERVED WITH AN ACCOMPANIMENT.

This project is a double-header which will require several class periods to complete. Make a lemon, cream, or chocolate pie. Also make an apple or other fruit pie and serve it with an accompaniment. Make cinnamon sticks or cheese straws with leftover pie dough.

1. This project will include several demonstrations and several working periods. The number of lessons will depend upon the length of your periods, but the following schedule may fit your working time.

First day. Your teacher will demonstrate the mixing of pie dough and then store it in the refrigerator until the next day. Using previously chilled pie dough she will demonstrate rolling it out and making a pie shell for a one-crust pie. You will make your pie dough and store it in the refrigerator.

Second day. Your teacher will demonstrate the making of pie fillings, such as cream, lemon, and chocolate. You will roll out your pie dough and make your pie shells.

Third day. You will make your filling for the pie shell you made yesterday.

Fourth day. Your teacher will demonstrate making a two-crust apple pie and, possibly, a fruit pie. You will serve the one-crust pie which you have made.

Fifth day. You will make an apple pie and an accompaniment to go with it. If the period is long enough, you can serve the pie the same day.

2. After your technical work has been finished, hold a criticism of your pies, the accompaniments, the covers, and your eating manners.

Some cooks believe that they can do this job best with their fingers, but there are strong arguments against it. The heat of the fingers is likely to soften the fat, which is undesirable. Besides, it is a messy operation which requires time out for an extra washing of the hands.

2. The second step in mixing pie dough consists of adding the water to the flour and fat mixture. The temperature of the water plays an important part in the kind of pastry you make. Ice-cold water makes for flaky pastry, while warmer water makes for a mealy pastry. Add the water slowly, about a teaspoon at a time; then mix quickly and lightly with a fork. Add only enough water to pick up the small particles. *Caution: Too much water makes the pie crust tough.*

Next, dump the dough onto a piece of oiled paper and press into a ball. Wrap in the oiled paper and chill in the refrigerator. This will make the dough much easier to handle when rolling it out and fitting it into the pie plate. Good pie dough is neither sticky nor crumbly.

Hot water pastry is made by pouring boiling water over the shorten-



General Foods Corporation

Cherry pie is a favorite fruit pie served at the American table.

ing and then beating until creamy. The flour and salt are added to the water and fat mixture to form a soft dough. The dough is then chilled.

Some people believe that pastry is more tender when made by this method. However, it has a tendency to crumble and lacks flakiness.

This flour-paste method of mixing pastry is a variation of the conventional method. The difference in the two methods is shown in the steps pictured on page 252.

Baking pie shells and two-crust pies. Both pie shells and filled pies should be started in a hot oven (450°F.). The oven should be lit before the pie crust is rolled out so the oven is heated to the proper temperature when the pies are ready.

Pie shells should be baked about 12–15 minutes at 450°F. When baked at too low a temperature, they shrink and become misshapen; and when they are baked at too high a temperature, the edges burn before the center of the shell is baked. A perfect pie shell is firm and dry with even golden-brown edges.

Two-crust pies are baked at 425°F. for 30–45 minutes. Some fillings require longer than others. For example, green apples require longer cooking than softer ones.

The custard pie involves a special problem in baking which is hard to solve. How can the pie crust be baked at a high temperature so that it will be dry and flaky, and the custard be baked at the same time at a low temperature so that it will be tender and smooth? Obviously, they can't! The best solution is to bake a pie shell in a hot oven and to bake a custard in a greased pie tin of the same size in a slow oven. Then when the custard has cooled, slip it into the pie shell.

Pie fillings for one and two-crust pies. A cake may be enjoyed without frosting, but a pie without filling is hardly appreciated! There is a large variety of fillings for both one and two-crust pies.

Cream fillings for pie shells offer a wide variety of choices. Banana cream, butterscotch, chocolate, cocoanut, and pineapple cream fillings, topped with meringue [muh-rang'] made of egg whites and sugar, are beautiful and luscious desserts. These cream fillings are made in the same way as cornstarch puddings, but should not be quite so stiff. Some cookery experts say that they should be poured into the pie shells while hot, so that they can cool to a perfect consistency without being disturbed. Others say that they should be cooled first, so as to protect the crust from soaking.

A pleasant variation of the cream pies is the chiffon filling. For this filling, gelatin is added to the mixture; and when the mixture is partially chilled, it is beaten to a chiffon-like texture. Care should be taken not to add too much gelatin, or the filling will become disagreeably rubbery.

Fillings for two-crust pies include fresh fruits, dried fruits, and mincemeat. Fresh fruit fillings require a thickening agent to prevent the pie from being too juicy. Flour, cornstarch, or tapioca may be used for this purpose. The amount depends upon the juiciness of the fruit. An apple pie usually requires only 1 or 2 tablespoons of flour, but a berry pie needs about 4 tablespoons of flour or 2 of cornstarch. It is important to use just the right amount of thickening. Fruit filling which is thin and runs all over the place is as equally undesirable as thick filling which has no juice at all.

Standards for good pies. The following points will help you to judge the quality of a pie. Not all the points apply to each kind of pie.

1. Is the crust tender, flaky, and crisp, without a tendency to crumble easily? Is the bottom crust equally good?
2. Is the crust lightly and evenly browned?
3. Is the cream filling smooth and stiff enough to prevent running but not so stiff as to be rubbery?

4. Is the custard filling tender and quivery but holds its shape when cut?

5. Is the fruit filling juicy without being runny or thick and pasty?

6. Is the meringue light, slightly moist, and lightly browned?

Variations in pie recipes. There are numerous variations in pie recipes which add to our interest and pleasure in this popular kind of dessert.

Small individual pies and tarts make delightful desserts. Lattice tops on fruit pies are interesting in effect and good to eat.

The crumb crusts, made by combining sugar and shortening with crushed corn flakes, graham crackers, vanilla wafers, or zwieback, are easy to make and very good with certain types of fillings.

Use up your leftover pastry. Never throw away the scraps of pastry which may be left from a pie. Make them into cheese straws, sugar wafers, or cinnamon wafers as suggested in the recipes on pages 256 and 257. These make good accompaniments to serve with salads, pies, and other desserts.

Recipes for pies

PLAIN PASTRY 1

FOR AN EIGHT-INCH TWO-CRUST PIE

2 c. sifted all-purpose flour	$\frac{2}{3}$ c. shortening
1 t. salt	3 to 5 T. cold water

SIFT flour and measure 2 c.; add 1 t. salt and sift.

CUT $\frac{2}{3}$ c. shortening into flour with two knives or pastry blender until the fat is broken up the size of peas.

SPRINKLE 3 to 5 T. water carefully into flour, so as not to add more than needed, and with a fork blend to make a stiff dough; roll in waxed paper and chill.

PASTRY 2

FOR AN EIGHT-INCH TWO-CRUST PIE

2 c. sifted all-purpose flour	$\frac{2}{3}$ c. shortening
1 t. salt	$\frac{1}{4}$ c. cold water

SIFT flour and measure 2 c.; add 1 t. salt and sift.

MEASURE $\frac{1}{3}$ c. flour and add $\frac{1}{4}$ c. water to form a paste.

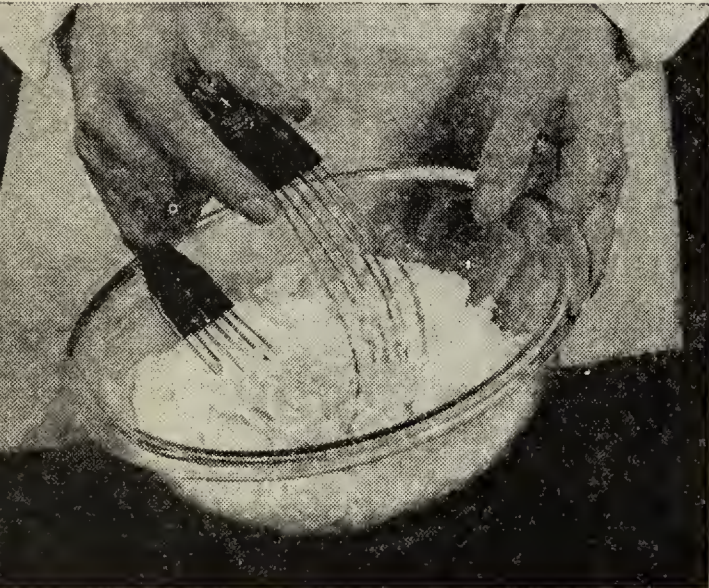
CUT IN $\frac{2}{3}$ c. shortening to the remaining flour with two knives or pastry blender until the shortening is broken up the size of peas.

ADD paste mixture to flour and shortening to form a dough; roll in waxed paper and chill.



The Crisco Kitchen

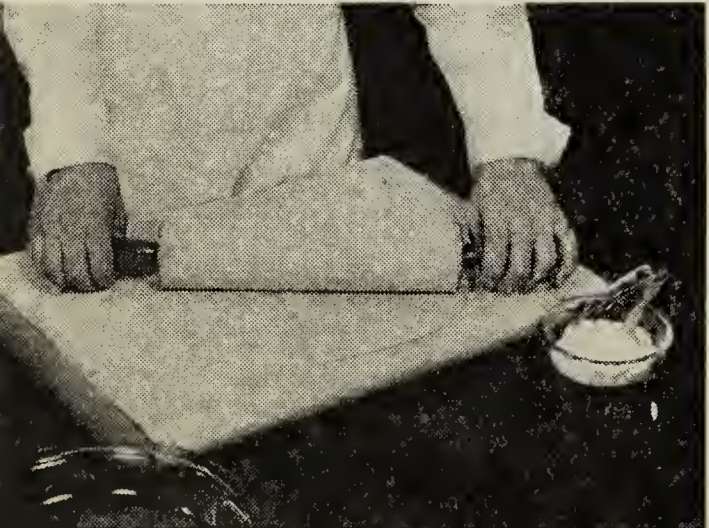
1. Cutting fat into flour



2. Adding water to flour-fat mixture



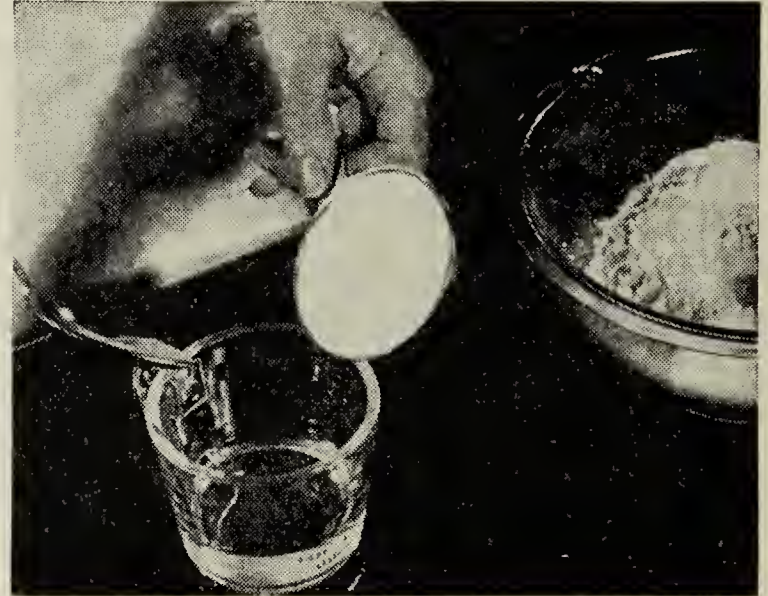
3. Rolling dough for crust



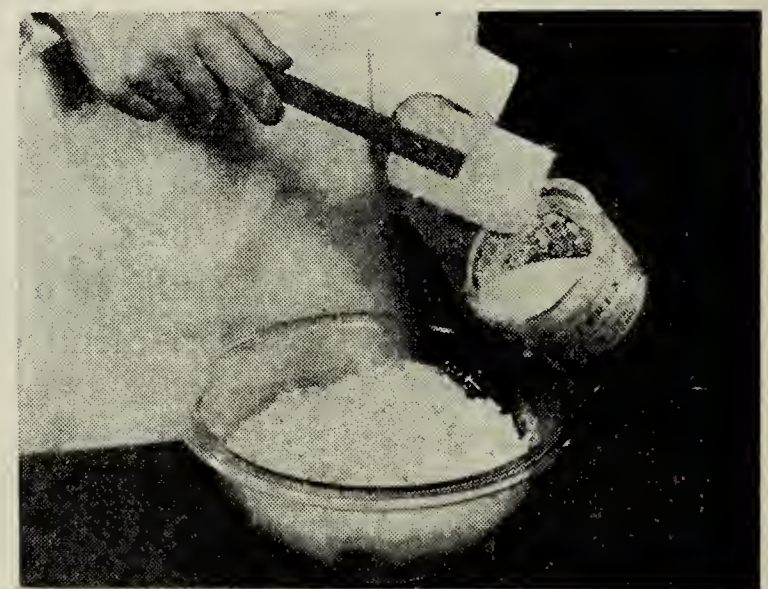
TWO METHODS OF MIXING PLAIN PASTRY

These pictures show the steps in the conventional and the flour-paste methods of mixing pastry. Notice that the first steps and last steps are the same. Recipes are given on page 251.

2a. Making flour-water paste



2b. Adding flour-water paste to the flour-fat mixture



4. Fluting edge of pastry for shell



HOT WATER PASTRY

FOR AN EIGHT-INCH TWO-CRUST PIE

2 c. sifted all-purpose flour	1 t. salt
1 t. baking powder	$\frac{2}{3}$ c. shortening
$\frac{1}{3}$ c. hot water	

SIFT flour and measure 2 c.; add 1 t. salt and 1 t. baking powder; sift.

ADD $\frac{2}{3}$ c. shortening to $\frac{1}{3}$ c. boiling water, and stir until smooth. Then add to flour and stir until blended; roll in waxed paper and chill.

APPLE PIE

SERVES 6-7

6 to 8 tart apples	$\frac{1}{3}$ t. cinnamon
$\frac{1}{2}$ c. to $\frac{3}{4}$ c. sugar, depending upon tartness of the apples	F. G. nutmeg
1 T. flour	1 T. butter or fortified margarine
2 t. lemon juice	plain pastry for a two-crust pie

PREPARE plain pastry and chill.

MIX $\frac{1}{2}$ to $\frac{3}{4}$ c. sugar, F. G. nutmeg, $\frac{1}{3}$ t. cinnamon, and 1 T. flour together; measure 1 T. butter or margarine and extract 2 t. lemon juice.

ROLL a little more than half of the pastry $\frac{1}{8}$ inch thick on a slightly floured board or pastry cloth, making the crust large enough to come generously up the sides of the pie pan. Place in bottom of 8-inch pan, allowing the edges to come over pan, and let stand until top crust is rolled. This permits the pastry to take shape, and less shrinkage will occur. Notice the step pictures for making pie crust on opposite page.

TURN oven to 450° F.

ROLL top crust a little thinner than the bottom crust and $\frac{1}{2}$ to 1 inch wider than the pie pan. While the crust is flat on the board, make a few small gashes or decorations to permit steam to escape.

QUARTER apples; peel and slice $\frac{1}{4}$ inch thick.

FIT bottom crust in pan; arrange half the apples on crust, and sprinkle with half the sugar and spices. Repeat, heaping the apples in the center of the pie. Sprinkle with lemon juice and dot with butter.

BRUSH edge of bottom crust with cold water; lay top crust on and seal edges. Trim off excess dough and flute with the fingers. Bake in a hot oven (450° F.) for 15 minutes; reduce heat to 325° F. and bake for 35 minutes.

STREUSEL TOPPING FOR APPLE PIE

$\frac{3}{4}$ c. sifted all-purpose flour	$\frac{1}{2}$ t. cinnamon
$\frac{1}{3}$ c. brown sugar, firmly packed	$\frac{1}{3}$ c. butter or fortified margarine

SIFT flour and measure $\frac{3}{4}$ c.; add $\frac{1}{3}$ c. sugar and $\frac{1}{2}$ t. cinnamon; sift.
 CREAM $\frac{1}{3}$ c. butter or margarine and blend with flour. Sprinkle on top of apple pie instead of putting on top crust.

CHERRY PIE

3 c. pitted sour cherries and juice $\frac{1}{8}$ t. salt
 2 T. minute tapioca or 4 T. flour 1 T. melted butter or fortified margarine
 1 c. sugar, depending on tartness of fruit pastry for a two-crust pie

PREPARE pastry and chill.
 COMBINE 2 T. minute tapioca or 4 T. flour, 1 c. sugar, $\frac{1}{8}$ t. salt, and 1 T. butter or margarine with 3 c. cherries.
 ROLL half of pastry to $\frac{1}{8}$ -inch thickness on a slightly floured board or pastry cloth; fold dough in half and lay across an 8-inch pie pan.
 ROLL top crust a little thinner, and cut a few slits or make a decoration.
 TURN oven to 450° F.
 FIT bottom crust in pan; moisten the edges slightly with water, and fold edges of dough up and over to form rim pocket.
 POUR cherry mixture into pastry; moisten edges of crust with water, fit the upper crust over the top, and press lightly so as not to tear pastry. Trim off top crust, being careful not to cut the under crust. With the fingers or the floured tines of a fork, press edges of the two crusts together and make a tight seal around the pie.
 BAKE in a hot oven (450° F.) for 15 minutes; reduce heat to 350° F., and bake for 30 minutes.

PUMPKIN PIE

SERVES 6

$1\frac{3}{4}$ c. canned or steamed pumpkin $\frac{1}{2}$ t. ginger
 $\frac{3}{4}$ c. light brown sugar, firmly packed $1\frac{1}{2}$ c. evaporated milk
 $\frac{1}{2}$ t. salt 2 eggs, well beaten
 1 t. cinnamon pastry for one-crust pie

PREPARE pastry, chill, roll, and fit in pie pan.
 TURN oven to 450° F.
 BEAT 2 eggs well; blend in $\frac{3}{4}$ c. sugar, $\frac{1}{2}$ t. salt, 1 t. cinnamon, and $\frac{1}{2}$ t. ginger. Add $1\frac{3}{4}$ c. pumpkin and $1\frac{1}{2}$ c. milk; mix well.
 POUR mixture into unbaked pie shell and bake in hot oven (450° F.) for 15 minutes; reduce heat to 300° F. and bake for 45 minutes, or until a knife inserted in center of pie comes out clean. Cool in pie tin before serving.

LEMON CHIFFON PIE

SERVES 6

3 egg yolks, well beaten	F. G. salt
3 egg whites, stiffly beaten	1 T. gelatin
1 c. sugar	$\frac{1}{4}$ c. cold water
4 T. lemon juice	1 cooled baked 8-inch pie shell
grated rind of one lemon	

Topping

$\frac{1}{2}$ c. heavy cream	$\frac{1}{4}$ t. vanilla
2 T. sugar	

PREPARE pastry for a one-crust pie; chill. Make an 8-inch pastry shell. Bake in hot oven (450° F.) for 15 minutes.

SOFTEN 1 T. gelatin in $\frac{1}{4}$ c. cold water.

GRATE rind of lemon; extract 4 T. juice and remove seeds.

BEAT 3 egg yolks in the top of the double boiler until thick and lemon colored; add $\frac{1}{2}$ c. sugar, lemon juice, rind, and F. G. salt; cook over boiling water, stirring constantly, until thick. Remove from heat. Add gelatin and stir until dissolved. Cool until sirupy.

BEAT 3 egg whites until fluffy, gradually adding $\frac{1}{2}$ c. sugar. Continue to beat until stiff; fold into the cooled cooked mixture.

GENTLY pour into pastry shell and chill until firm.

BEAT $\frac{1}{2}$ c. cream until stiff; add $\frac{1}{4}$ t. vanilla and 2 T. sugar, and spread over the top of pie.

CREAM PIE

SERVES 6

$\frac{1}{4}$ c. sifted all-purpose flour	1 T. butter or fortified margarine
$1\frac{1}{2}$ c. scalded milk	3 egg yolks, well beaten
$\frac{1}{2}$ c. sugar	1 t. vanilla
$\frac{1}{4}$ t. salt	1 cooled baked 8-inch pie shell

Meringue

3 egg whites	6 T. sugar
F. G. salt	

MAKE plain pastry for one-crust pie and chill; roll and fit into an 8-inch pie pan, and bake in a hot oven (450° F.) for 15 minutes.

SCALD $1\frac{1}{2}$ c. milk.

SIFT flour and measure $\frac{1}{4}$ c.; add $\frac{1}{4}$ t. salt and $\frac{1}{2}$ c. sugar, and place in top of a double boiler. Add scalded milk and cook over low heat until thick and smooth, stirring constantly.

- BEAT** 3 egg yolks well; slowly stir in the milk mixture and return to double boiler. Cook 2 minutes over hot water, stirring constantly. Remove from heat, and add 1 T. butter or margarine and 1 t. vanilla; cool.
- BEAT** 3 egg whites until light; gradually add 6 T. sugar and F. G. salt; beat until stiff. Fold in about $\frac{1}{3}$ of the meringue to the cream filling; pour into baked shell; top with remaining meringue and bake in a moderate oven (350° F.) for 12 to 15 minutes or until a golden brown. Cool.
- NOTE:** Cocoanut cream pie may be made by sprinkling $\frac{1}{2}$ c. shredded cocoanut on top of the meringue.

FRUIT COBBLER

SERVES 6-8

- 1 recipe basic biscuit plus 2 T. sugar $\frac{1}{2}$ c. sugar, depending on tartness of
4 c. fruit fruit
2 T. butter or fortified margarine
- ARRANGE** 4 c. berries or cut fruit in a shallow baking dish; sweeten to taste and dot with 2 T. butter or margarine.
- TURN** oven to 450° F.
- PREPARE** basic biscuit recipe, adding 2 T. sugar to the flour. Roll out biscuit dough $\frac{1}{4}$ inch thick to fit baking dish, and place over top of fruit. Bake in a hot oven (450° F.) for 25 to 35 minutes.

BROWN SUGAR LEMON SAUCE

- $\frac{1}{2}$ c. brown sugar, firmly packed 1 c. boiling water
1 T. cornstarch 1 T. lemon juice
 $\frac{1}{4}$ t. salt $\frac{1}{2}$ t. lemon rind
1 T. butter or fortified margarine
- MIX** $\frac{1}{2}$ c. sugar, 1 T. cornstarch, and $\frac{1}{4}$ t. salt in saucepan; slowly add 1 c. boiling water and, stirring constantly, cook about 5 minutes or until the mixture thickens and the sauce is clear.
- REMOVE** from heat; add 1 T. butter or margarine, 1 T. lemon juice, and $\frac{1}{2}$ t. lemon rind.

CHEESE STRAWS

- Leftover pastry from pie 3-4 T. grated cheese
- ROLL** pastry $\frac{1}{8}$ inch thick; sprinkle half the pastry with cheese and fold over the other half of pastry. Roll lightly; cut in strips $\frac{1}{2}$ inch wide and three inches long. Place on a baking sheet and bake in a moderate oven (350° F.) for 8 to 12 minutes.

CINNAMON STICKS

Leftover pastry from pie

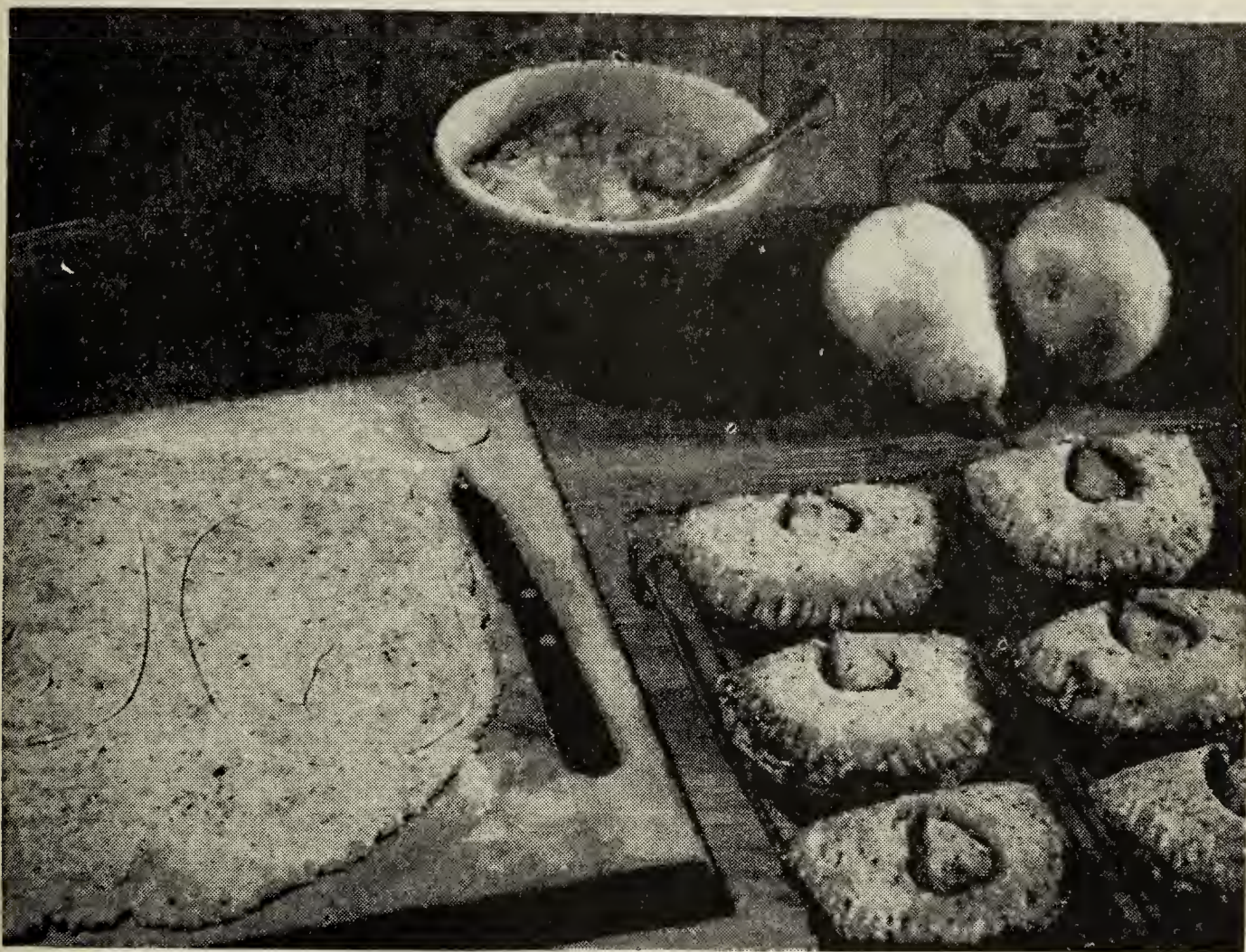
2 T. sugar

$\frac{1}{8}$ t. cinnamon

ROLL pastry $\frac{1}{8}$ inch thick.

MIX $\frac{1}{8}$ t. cinnamon and 2 T. sugar together; sprinkle on pastry; cut strips $\frac{1}{2}$ inch wide and three inches long. Place on a baking sheet and bake in a moderate oven (350° F.) for 8 to 12 minutes.

FRESH PEAR TURNOVERS



Oregon-Washington-California Pear Bureau

SERVES 6

$1\frac{1}{2}$ c. sifted all-purpose flour

$\frac{1}{4}$ c. bran

$\frac{1}{2}$ t. salt

$\frac{1}{4}$ t. ginger

$2\frac{1}{2}$ c. chopped fresh pears

$\frac{1}{4}$ c. brown sugar, firmly packed

$\frac{1}{2}$ c. shortening

4 T. cold water, more or less

2 t. lemon juice

CRUSH $\frac{1}{4}$ c. bran cereal into fine crumbs.

SIFT flour and measure $1\frac{1}{2}$ c.; add bran and $\frac{1}{2}$ t. salt; sift. Cut in $\frac{1}{2}$ c. shortening with pastry blender or with two knives.

ADD just enough cold water, a little at a time, until dough is moist enough to hold together. Chill.

- MIX together $2\frac{1}{2}$ c. chopped pears, 2 t. lemon juice, $\frac{1}{4}$ t. ginger, and $\frac{1}{4}$ c. brown sugar.
- TURN oven to 400° F.
- ROLL dough lightly $\frac{1}{8}$ to $\frac{1}{4}$ inch thick on a slightly floured board or pastry cloth and cut into six $4\frac{1}{2}$ -inch squares.
- PLACE the pear mixture on half of each square. Fold over other half; moisten edges with juice from fruit and seal by pressing the edges with fingers or the floured tines of a fork. Prick tops with a fork and place turn-overs on a baking sheet; bake in a moderate oven (400° F.) for 35 minutes.
- SERVE with brown sugar lemon sauce. (See page 256.)

CLASS ACTIVITIES

1. Compare the qualities and costs of home-baked and commercially baked pies in your community.
2. Suppose that your school cafeteria has lemon pie, chocolate pie, and raisin pie among the desserts. Which one would you choose if you wished to obtain the most fat in your diet? The most vitamin C? The most iron?
3. How can a mother with very young children manage pie desserts to satisfy the needs and appetites of the whole family?

FUN WITH FOOD AT HOME

1. Experiment with the semiprepared pie crust mixtures and pie fillings which are available in your local stores. Are the results good? What is the cost per pie?
2. Make some of the special variations of pie recipes which are suitable for party desserts. You might try "Pennsylvania Dutch" shoo-fly pie, deep-dish apple pie, or latticed peach pecan pie.
3. Plan a Sunday night supper for your family and guests which includes vitamin C salad, a hot bread, and a beverage for the main course and pie for dessert.
4. Add the following to your collection of recipes: plain pie crust, the basic recipe and variations for cream pies, apple pie, and a crumb pie.

5. Foods fried in deep fat

Frying is the process of cooking in hot fat and includes pan-frying in shallow fat and kettle-frying in deep fat. Pan-frying is sometimes called sautéing, and kettle-frying is known as French-frying.

Cooking in deep fat is especially well adapted to certain types of foods such as doughnuts, fritters, croquettes, nuts, potatoes, and other vegetables. Deep-fat frying not only cooks the food, but it develops the

flavor and adds the pleasant taste of browned fat. The appearance of the food is improved with a beautiful, golden-brown coat. Pale, mild-flavored raw potato strips emerge from the deep-fat kettle tasty, full-flavored and with fine, sun-tan complexions! Uncooked doughnuts are transformed into luscious, brown cakes after a few moments in the deep-fat kettle. Did you know that the old fashioned name for doughnuts is "fried cakes"?

What kind of fat for deep-fat frying? Important considerations in the selection of a fat for deep-fat frying are smoking point, flavor, expense, and convenience.

Deep-fat frying requires high temperatures, sometimes as high as 400° F., and a fat used for this purpose should not smoke at frying temperatures. When a fat smokes, it is breaking down chemically; the fumes are irritating to the nose and throat, and if absorbed by the fried food, produce a disagreeable flavor. Besides this, a fat which has smoked does not keep well and may become rancid. Therefore, only fats with high smoking temperatures are suitable for deep-fat frying. Butter and olive oil have low smoking temperatures, so they cannot be used advantageously for this purpose. Corn oil, cottonseed oil, the hydrogenated vegetable fats, and high-quality lards have high smoking temperatures which make them suitable for deep-fat cookery. Since they are either bland or have a pleasing flavor, they are acceptable from this standpoint.

Many people prefer the oils rather than the fats which remain solid at room temperatures, because they are more quickly and easily poured into the kettle before frying. However, it is not difficult to spoon the solid fats into the kettle, and they can be poured back into the storage can while they are still hot.

Fats used for pan-frying need not have as high smoking points as fats for deep-fat frying because pan-frying can be done at a lower temperature. Therefore, butter is well adapted for use in sautéing.

General procedure in deep-fat frying. This cooking process can be carried on with perfect safety if you are thoughtful and careful about your procedure. Remember that hot fat is much hotter than boiling water! Do not use a kettle which tips easily, and be especially careful to turn the handle of the kettle in toward the back of the range so that a sudden arm movement cannot upset the hot fat.

Equipment should include a heavy pan or kettle with a flat bottom which does not tilt easily and a basket which fits the pan. A thermometer for measuring fat temperature is desirable.

CLASS PROJECT: A LIGHT DINNER PLATE WITH FRITTERS OR CROQUETTES, FRUIT SALAD, COOKED VEGETABLE, AND A HOT BREAD.

Plan a well-balanced plate which can be prepared in a minimum of time.

1. Watch a demonstration of making fritters and cooking them in deep fat. Study the recipes on page 263 and the general procedure for deep-fat frying.

2. Make a work schedule which will allow time for the preparation of all the foods, serving the plates, and a criticism discussion.

3. Work efficiently and carefully, remembering to clear-up as you go.

4. Criticize the plates for attractiveness, combinations of food, and taste-appeal.

SAFETY WARNING: Beware of overheating fat. If hot grease blazes up, maneuver a lid over the pan. Never use water.

The general procedure includes the following steps:

1. Put the fat into the kettle and heat it. Watch the thermometer so that the temperature does not rise to the smoking point. If you do not have a thermometer, you can use the bread test. Cut some 1-inch cubes of stale bread. Drop one cube at a time into the fat and count the time required for the bread to become golden brown. Below is a table of temperatures and times required for browning the bread.

Temperature	Time required to brown 1-inch cube of stale bread
350–375 F.	60 seconds
375–385 F.	40 seconds
385–395 F.	20 seconds

2. While the fat is heating (be sure it does not overheat), prepare the food which is to be fried. Put it into the basket and lower the basket slowly into the hot fat. It must be eased in a little at a time to prevent the fat from boiling up and over the edges of the pan.

If you do not have a basket, put the food on your slotted spoon and lower it gently into the hot fat. If you have more than one batch to fry, test the temperature again before putting in the second batch.

3. When the food has turned golden brown, it is ready to remove from the fat. Lift the basket out of the fat, and hook it over the edge of the kettle to drain for a short time. Then lift the food out with your slotted spoon onto towel paper and let the extra fat be absorbed by the paper. This is the time to salt the food. Never salt food before frying,



The Crisco Kitchen

Crisp, brown fritters, fresh from the deep-fat frying kettle, are a special feature on the dinner plate.

because it has a tendency to spoil the fat for future use. The following table gives the correct temperature and approximate frying time for several types of foods:

Food	Temperature	Approximate cooking time
Doughnuts	350–375 F.	3–5 minutes
Fritters	350–375 F.	3–5 minutes
Croquettes	375–385 F.	3 minutes
Potatoes (strips)	385–395 F.	5–10 minutes

Great care should be taken to have the fat at the correct temperature and to remove the food from the fat as soon as it is cooked. Exposure of the food to fat held at too-low temperature and overcooking results in soggy, grease-soaked food.

Care of fat used for deep-frying. The same fat can be used many times unless it is allowed to smoke continuously. After the frying, strain the fat through cheesecloth in order to remove the tiny particles



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In case of burning grease, maneuver a pot cover or other noncombustible object into position over the pan in order to close it tightly and to smother the flame.

of food which fall to the bottom of the kettle. If these are allowed to remain in the fat, they become scorched and burned, thus discoloring the fat. Keep the fat or oil in a cool place away from the range.

Fritters and croquettes. Study of the recipes for fritters and croquettes on the opposite page will show you that they do not require any new technique in the method of mixing, only in the cooking process. Fritters are prepared by mixing a stiff batter with the muffin method and then cooking by immersing spoonfuls in hot fat. Croquettes are prepared by first making a thick white sauce to which the other ingredients are added. Then the mixture is chilled so that the croquettes can be formed and will hold their shape. The cooking is done in the same manner as for fritters, by immersing in hot deep-fat. In both cases the cooking time is very short.

Fritters and croquettes offer excellent ways of using leftovers. A cupful of whole-kernel corn (well drained) may be added to the fritter batter. Served with sirup, this makes a hearty and appetizing dish. Other leftovers, such as pineapple, bananas, or cherries, may be added

to the fritter batter. Croquettes offer a good way to use leftover meat, chicken, or rice. Tomato or mushroom sauce served as a topping for the croquettes adds to the attractiveness and taste-appeal of the dish.

Standards for fried foods. Remember these points in considering the quality of a fried food.

1. Is the food crisp on the outside, mealy and well cooked on the inside? Soggy food soaked with extra fat is unappetizing and not easily digested.

2. Is the color an evenly distributed golden brown? Dark brown indicates overcooking in too-hot fat, and pale spots indicate undercooking.

3. Is the flavor of the fat good? Rancid fat is disagreeable in flavor.

Recipes for deep-fat frying

CORN FRITTERS

SERVES 4

1 c. fresh or canned corn, drained	$\frac{1}{4}$ c. milk
$\frac{3}{4}$ c. sifted all-purpose flour	1 egg
$\frac{1}{2}$ t. baking powder	fat for frying
$\frac{1}{2}$ t. salt	

SIFT flour and measure $\frac{3}{4}$ c.; add $\frac{1}{2}$ t. baking powder and $\frac{1}{2}$ t. salt; sift.
HEAT fat to 375° F. (hot enough to brown a 1-inch cube of bread in 60 seconds).

BEAT egg well; add $\frac{1}{4}$ c. milk, 1 c. corn, and flour; mix thoroughly.

DROP by teaspoonfuls into hot fat (375° F.). Fry until golden brown and drain on clean absorbent paper or paper toweling. Serve hot with sirup.

CROQUETTES

Meat, fish, or poultry

MAKES 9 CROQUETTES

2 c. diced or ground cooked meat,	$\frac{1}{8}$ t. onion salt
poultry, or flaked fish	3 T. butter or fortified margarine
1 c. milk	2 T. milk
$\frac{1}{4}$ c. flour	1 egg
$\frac{3}{4}$ t. salt	sifted dry bread crumbs
$\frac{1}{8}$ t. celery salt	fat for frying

MIX $\frac{1}{4}$ c. flour and $\frac{3}{4}$ t. salt in a saucepan. Gradually add 1 c. milk, then add 3 T. butter or fortified margarine, and cook over moderate heat until thick. Add 2 c. meat or fish, $\frac{1}{8}$ t. celery salt, and $\frac{1}{8}$ t. onion salt; cool.

- BEAT egg and add 2 T. milk.
- SHAPE meat mixture into croquettes, roll in crumbs, then in beaten egg, and again in crumbs. Chill in the refrigerator.
- HEAT fat to 375° F. (hot enough to brown a 1-inch cube of bread in 60 seconds). Place croquettes in wire basket and cook until a golden brown. Drain on clean absorbent paper or paper toweling. Serve hot.
- NOTE: Croquettes may be served with some type of sauce such as tomato (page 338), cheese (page 201), or white sauce (page 74).

APPLE FRITTERS

SERVES 4-5

- | | |
|--|------------------------|
| 2 or 3 large apples, pared and cut in eights | $\frac{1}{4}$ c. sugar |
| $\frac{3}{4}$ c. sifted all-purpose flour | $\frac{1}{8}$ t. salt |
| 1 t. baking powder | $\frac{1}{3}$ c. milk |
| | 1 egg, well beaten |
- SIFT flour and measure $\frac{3}{4}$ c.; add 1 t. baking powder, $\frac{1}{8}$ t. salt, and $\frac{1}{4}$ c. sugar; sift.
- PLACE fat on low heat and heat to 375° F. (fat hot enough to brown a 1-inch cube of bread in 60 seconds).
- BEAT egg well; add $\frac{1}{3}$ c. milk, and add both to flour mixture. Mix thoroughly.
- PARE and cut each apple in eight pieces; dip in batter and fry in deep fat until golden brown, or for about 4 minutes. Drain on clean absorbent paper or paper toweling. Sprinkle with confectioners' sugar or serve with maple sirup or lemon sauce (page 256).

DOUGHNUTS

MAKES 24-30

- | | |
|-------------------------------|------------------------------|
| 2 c. sifted all-purpose flour | $1\frac{3}{4}$ T. shortening |
| 1 t. baking powder | $\frac{1}{3}$ c. buttermilk |
| $\frac{1}{2}$ t. salt | $\frac{1}{2}$ t. soda |
| $\frac{1}{8}$ t. nutmeg | 1 egg, well beaten |
| $\frac{1}{2}$ c. sugar | $\frac{1}{2}$ t. vanilla |
- SIFT flour and measure 2 c.; add 1 t. baking powder, $\frac{1}{2}$ t. salt, and $\frac{1}{8}$ t. nutmeg, $\frac{1}{2}$ t. soda; sift.
- CREAM $1\frac{3}{4}$ T. shortening; gradually add $\frac{1}{2}$ c. sugar and $\frac{1}{2}$ t. vanilla. Cream until light and fluffy.
- BEAT egg well and add to shortening and sugar mixture.
- ADD flour and buttermilk alternately to egg mixture and stir until well mixed; roll in waxed paper and chill.
- HEAT fat to 375° F. (fat that will brown a 1-inch cube of bread in 60 seconds).

- CUT** a small portion of the dough at a time and roll on a slightly floured board or pastry cloth to $\frac{1}{4}$ -inch thickness. Cut with floured 2-inch doughnut cutter and fry in deep fat 375° F. until one side is a golden brown; turn to other side and brown.
- REMOVE** from fat with a slotted spoon or in frying basket, and drain on clean absorbent paper or paper toweling. Cool slightly and roll in granulated or confectioners' sugar.

FRENCH FRIED POTATOES

SERVES 4

- 4 or 5 potatoes (baking potatoes are best for French fries) fat for deep-fat frying
absorbent paper
salt
- PLACE** fat on to heat to 375° F. (fat that will brown a 1-inch cube of bread in 60 seconds).
- WASH** 4 or 5 potatoes, pare thinly, cut lengthwise into slices about $\frac{3}{8}$ of an inch thick, and then into strips about $\frac{3}{8}$ of an inch wide. Wrap in a clean tea towel and thoroughly dry.
- PLACE** a handful of potatoes at a time in the frying basket and gently lower it into the fat 375° F. Cook until a golden brown.
- RAISE** the frying basket out of fat; drain thoroughly; turn potatoes on clean absorbent paper or paper toweling; and shake them to absorb fat. Sprinkle with salt.
- PLACE** in a shallow baking pan in a very slow oven (200° F.) to keep warm while the remainder of potatoes are frying.

CLASS ACTIVITIES

1. Compare the costs of fats and oils suitable for deep-fat frying. Do this by determining the cost of 1 quart of oil and 1 quart of melted fat. If properly cared for, the fat should provide about 10 fryings without additional fat. What is the cost per frying?
2. List 4 things which will prolong the life of fat used for deep-frying.
3. Both pan and deep-fat frying are useful in producing appetizing leftover dishes. List a number of dishes which can be made in this way.
4. How can good food be ruined by cooking in fat?

FUN WITH FOOD AT HOME

1. Prepare salted nuts or soybeans by cooking in deep fat as suggested on page 95.
2. Make rice and meat croquettes for a quick plate supper.
3. Make French-fried noodles and serve with chop suey or a creamed dish.

Fry narrow, packaged noodles in deep fat at 360° F. until golden brown (about 2 minutes). Drain on towel paper.

4. Use leftover foods for fritters or croquettes.

5. Compute the cost of fats and oils used for all food purposes in your home kitchen for a week. Could the purchase of other fats for some purposes reduce the expenditure?

A SUMMARY OF YOUR STUDY OF THE FOOD FATS

Your study of this unit should help you to acquire certain definite knowledge about the food fats and their use. The basic processes, fats, and cookery skills which you should have learned are listed below.

<i>Basic cookery procedures</i>	<i>Skills in food preparation</i>
Cake method of mixing batters	Cookies
Standard method of mixing pie dough	Butter cakes
Deep-fat frying	Cream pies
Making uncooked frostings	Two-crust fruit pies
Making cooked frostings with egg whites	Fritters
	Croquettes
	<i>Nutrition facts</i>
<i>Points on buying and and care</i>	High energy value in fats
Comparison of butter and margarine	Vitamin A in butter and margarine
State and federal laws on butter and margarine	Vitamin D in some fats
Government-scored butter	
Selection of shortening	
Selection of fat for frying	
Comparison of commercially baked goods with home-baked products	
Semiprepared cake and pastry mixtures	
Hydrogenated fats	

WHAT DO YOU KNOW ABOUT THE FOOD FATS AND THEIR USES?

The following tests will help you to check your knowledge and understanding of the "fat family" in food preparation, selection, and nutrition.

A test of selection of fats and oils

Some of the following statements are true and some are false. On a separate sheet of paper write the number of each statement and the word "true" or "false" after it. **Do not write in this book.**

1. Butter is always a better source of vitamin A than margarine is.
2. Butter which is government graded with a 90 score is good table butter.
3. Lard contains more fat than vegetable fats.
4. Hydrogenated vegetable fats keep well upon the pantry shelf.
5. A federal law stipulates that butter must contain 80 per cent milk fat.
6. Hydrogenated vegetable fats generally cost as much as butter.
7. Margarine would be cheaper to the consumer if restrictive laws were repealed.
8. Butter is a good fat for pan-frying.
9. Olive oil is suitable for deep-fat frying.
10. Leaf lard is a good-quality fat.

To test your understanding of recipes

Five recipes are stated briefly below. Which is for biscuits, for muffins, for pie dough, for butter cake, and for cookies? You should be able to pick these out correctly, not because you remember the recipes, but because you can evaluate the results which are obtained from certain proportions of ingredients and methods of mixing. On a separate sheet of paper write the number of each recipe, and opposite the number write the correct answer.

Do not write in this book.

A. Cream together $\frac{1}{2}$ cup shortening and $1\frac{1}{2}$ cups sugar; add 2 beaten eggs and flavoring. Sift together $2\frac{1}{2}$ cups flour, $\frac{1}{2}$ teaspoon of salt, and 3 teaspoons of baking powder. Add dry ingredients alternately with 1 cup of milk to creamed mixture.

B. Cream together $\frac{1}{2}$ cup shortening and $1\frac{1}{4}$ cups of sugar. Add 1 beaten egg and flavoring. Sift together 2 cups of flour, $\frac{1}{2}$ teaspoon of salt, and 2 teaspoons of baking powder. Add this mixture to creamed mixture.

C. Sift together 2 cups flour, $\frac{1}{2}$ teaspoon of salt, 3 teaspoons of baking powder, and 2 tablespoons of sugar. Mix 1 beaten egg, 1 cup milk, and 3 tablespoons of melted shortening. Add liquid mixture to sifted mixture.

D. Sift together 2 cups flour, $\frac{1}{2}$ teaspoon salt, and 3 teaspoons baking powder. Cut 4 tablespoons shortening into the sifted mixture. Add $\frac{3}{4}$ cup milk.

E. Sift together 2 cups flour and $\frac{3}{4}$ teaspoon of salt. Cut $\frac{2}{3}$ cup shortening into flour mixture. Add 4 to 5 tablespoons of cold water.

What is wrong?

What is the mistake in each of the following cases? Select the best reason given in each instance. On a separate sheet of paper write the number of each question, and opposite the numbers write the letters (*a, b* etc.) to indicate the correct answers. **Do not write in this book.**

1. Tough pie crust is caused by:
 - a. Too much water.
 - b. Too much flour.
 - c. Too cold water.
 - d. Hot oven.
2. Cake with tough crumb is caused by:
 - a. Too much creaming.
 - b. Cool oven.
 - c. Bread flour.
 - d. Not enough eggs.
3. Soggy fried food is caused by:
 - a. Fat too hot.
 - b. Fat too cool.
 - c. Wrong kind of fat.
 - d. Food improperly prepared for frying.
4. Fallen cake is caused by:
 - a. Slow baking.
 - b. Bread flour.
 - c. Too much beating.
 - d. Baked too long.
5. Tough cookies are caused by:
 - a. Too little baking.
 - b. Not enough shortening.
 - c. Use of cake flour.
 - d. Wrong kind of shortening.

REFERENCES FOR FURTHER READING

- Harris, L. F., and Henderson, R. A., *Foods*. D. C. Heath and Company, 1938. Pp. 144-146, 194-204, 342, 471-487.
- Harris, J. W., and Speer, E. L., *Everyday Foods*. Houghton Mifflin Company, 1946 and 1941. Pp. 447-449, 491-510.
- Perry, Josephine, *Around the World Making Cookies*. M. Barrows and Company, 1940.
- Silver, Fern, *Foods and Nutrition*. D. Appleton-Century Company, Inc., 1941. Pp. 370-381.

6

The Green and Yellow Family

The food group composed of green and yellow vegetables is distinguished by a strongly marked family characteristic: vitamin A value. Yellow coloring matter in vegetables and fruits and green coloring in plants is closely associated with this vitamin. This coloring indicates that a substance known as carotene [care'-o-tin] is present. Carotene is not identical with vitamin A but, when eaten, is changed into vitamin A during the digestive process. For this reason it is sometimes called a provitamin. For practical purposes, in the selection of our everyday foods, we can think of those containing carotene as vitamin A foods. This food group is Group One of the seven basic foods.

Learn to use color as a guide in your selection of vitamin A foods. For example, sweet potatoes are rich in vitamin A value, but white potatoes contain very little. Head lettuce, which is generally pale green, contains much less carotene than leaf lettuce, which is bright green.

Gardeners will do well to remember about this color guide to vitamin A when they choose their vegetables. Instead of white corn, plant yellow corn; besides white potatoes, raise sweet potatoes; include winter squash as well as summer squash; include swiss chard, spinach, and plenty of carrots. Future Farmers of America and 4-H Club members should plan for vitamin A in their gardens.

Nutritionists recommend one or more servings of green or yellow vegetables every day. The same vegetable should not be counted twice, that is, as a supply of vitamin A and as vitamin C. You may eat *two* servings of the same vegetable, if it is rich in both vitamins, or eat one serving of each of two different vegetables in order to obtain an adequate amount of both nutrients.

CLASS PROJECT: A VEGETABLE PLATE RICH IN VITAMIN A.

Prepare and serve a vegetable plate which includes at least two vegetables rich in carotene.

1. Plan a combination of vegetables, such as buttered carrots, spinach, and water cress.

2. Study the recipes on pages 280 to 284, the time table for cooking vegetables on page 79, and the general directions given in this unit.

3. Plan a work schedule so that you are prepared to work quickly and efficiently.

4. Hold a quick inspection of the plates when they are ready to serve. After they have been eaten, discuss their attractiveness and their eating quality.

1. Vitamin A via vegetables

There are many agreeable ways of preparing carotene-rich vegetables which add interest and flavor to the daily menu. Raw vegetable salads, scalloped, buttered, or creamed vegetable dishes, and vegetable soups can add zest to luncheon, dinner, or supper.

Good technique in vegetable cookery is exceedingly important. Probably, no type of food is more abused in the cooking process than vegetables. Greens are overcooked until their color is dark and their texture slippery. Brussels sprouts are boiled until they are brown and withered, and peas are cooked until they pop out of their jackets. A good general rule to remember is that *vegetables should be cooked enough, but not too much*. Overcooking not only detracts from their appetizing quality, but greatly reduces the vitamin content. Avoid overcooking vegetables both for the sake of your appetite and your health. The table on page 79 gives the correct amount of time for cooking vegetables.

Food values in the green and yellow vegetables. The vital need for vitamin A in our diet was discussed in our study of butter and of other foods. It is essential to good eyesight, normal growth, good teeth and bones, and healthy skin and hair. Examination of the table of nutritive values (pages 62 and 63) shows that there are several green and yellow vegetables which are rich in vitamin A. Among these, carrots, greens, and sweet potatoes are richest in this nutrient.

In classifying the green and yellow vegetables as vitamin A foods, we should not forget that some of these same foods also belong to other food groups. For example, sweet potatoes, peas, and lima beans belong to the family of hearty vegetables as well as to the green and yellow



Poultry and Egg National Board

This vitamin-A platter includes spinach timbales, buttered carrots, and water cress.

group. Broccoli, spinach, and other greens are good sources of vitamin A and are also rich in vitamin C. Thus, one food can supply us with liberal quantities of more than one nutrient. Obviously, this should be taken into account in planning a balanced diet.

Remember that in the selection of vegetables for vitamin A value, the intensity of their color is important. Choose green celery instead of white, green cabbage rather than white, leaf lettuce instead of head lettuce, green asparagus instead of the bleached variety, and yellow turnips (called rutabagas or swedes) instead of white turnips. Plant parsley in your garden and grow a pot of it in your kitchen window. It is more than a decorative garnish for meats or salads because it is very rich in vitamin A.

The loss of vitamin A during food preparation. Vitamin A and carotene are lost by combining with oxygen. Therefore, exposure to air during the process of preparation for the table may seriously lower the vitamin A value. If possible, sweet potatoes, yams, carrots, and yellow turnips should be cooked with their jackets on and peeled just before serving. If they are peeled before cooking, it should be just

CLASS PROJECT: PLAN AN ABC VITAMIN LUNCHEON PLATE.

Prepare and serve a luncheon plate in which vitamins A, B, and C are well represented. For example, the menu might include cooked greens, tomatoes, cottage cheese, and whole-wheat muffins.

1. Plan your menu, being sure to use foods rich in vitamins A, B, and C. Plan also for an attractive combination of color and texture of foods.

2. Watch a demonstration of cooking greens, squash, and other vegetables. Study the recipes needed and the general directions given in this unit.

3. Make a work schedule which will provide for each food to be ready at the time for serving.

4. Hold a quick inspection of the luncheon plates; then discuss their appearance and taste quality after they have been eaten.

before they are put into the water. If necessary to peel them in advance, store them, carefully covered, in the refrigerator. Chopping or grating the vegetables hastens the loss of vitamin A considerably because many more surfaces are exposed to the air, thus inviting the action of oxygen on the vitamin A content.

Cooking increases the loss of vitamin A because the combination of oxygen and the vitamin is more easily accomplished in the presence of heat. Since there is oxygen in water, it can easily destroy the vitamin A when vegetables are boiled. When overcooked, beans, peas, and greens lose their bright green color, becoming grayish and dull. Both appearance and nutritive value are lost, because loss of color means loss of carotene.

Much of this loss can be prevented by correct cooking technique. First, the water should be boiled well before the vegetables are put into it, because oxygen escapes from the water during boiling. Vegetables cooked in preboiled water retain a much brighter color than if they are dumped into cool water and then brought to a boil. Second, the vegetables should never be overcooked. Boil them only until they are tender. They should not be mushy. The shortest possible cooking period helps to save color and vitamins.

The time element is important in preserving the vitamin A content of vegetables. As little time as possible should elapse between preparation and serving. Cole slaw which is shredded two hours before putting it upon the table loses more vitamin A than one which is shredded just before serving. Snap beans which are prepared in the morning for the evening meal and left in a pan on the table till time for cooking



Birds Eye Frosted Foods

What food values can you find in this lunch of tomato stuffed with cottage cheese, lima beans, asparagus, peas, spinach, bran muffins, and butter?

lose much more vitamin content than those which are taken from the refrigerator just in time to cut them up and drop them into boiling water. Corn, peas, and other vegetables are considered more tasty when brought straight from the garden to the kitchen for immediate cooking. They are also more nutritious. Those which travel a long route from the truck farm to the grocery store and then to the home kitchen, where they are kept several days before use, not only lose their crispness but also considerable vitamin content.

Vitamin A value in canned vegetables. There is little loss of vitamin A in either commercial or home canning of fruits and vegetables. In both hot-water-bath and pressure-cooker methods, boiling water or sirup is poured over the food, and the cans are sealed airtight, thus preventing loss of vitamin by exposure to oxygen. However, there may be considerable loss of the vitamin when the canned foods are opened, unless they are heated quickly and served at once. Canned vegetables should always be heated in the liquor from the can. If they are to be creamed, the liquor should be used in the sauce.

Hints on caring for fresh vegetables. The desirable quality of freshness and crispness in raw vegetables can be considerably helped or destroyed in our own kitchens. We expect sellers of fresh produce to keep it in good condition for us. It is shipped in refrigerated cars, and in first class retail markets it is kept chilled by placing it on beds of ice.

Consumers should do their best to continue this careful handling of fresh vegetables. When the vegetables are brought home from the market, they should be washed and stored in the refrigerator in a tightly closed container or in the hydrator. Lettuce should be washed, and the discolored and bruised leaves removed. Carrots should be washed and all but an inch of the tops removed, and this same treatment should be given to beets. Celery, parsley, spinach, and other greens should be washed, the undesirable portions removed, and then stored in tightly covered containers. If peas or lima beans are shelled and put into a glass jar, they will be crisp and ready for instant use. Snap beans can be stored in covered jars or pans if they do not fit into the hydrator.

Careful cleaning and storing of fresh vegetables will pay for itself in better eating and in quicker meal preparation. It simplifies the dinner preparation considerably when the peas are already shelled, the lettuce is clean and crisp, and the carrots are clean and ready to scrape.

It sometimes happens that, in spite of our effort to buy fresh vegetables and to keep them fresh, wilted vegetables find their way into our kitchens. In this case, they can be crisped by putting them into cold water, then setting the pan into the refrigerator, and letting them stand for several hours.

Attractive combinations on the dinner plate. Appetizing quality is always enhanced by pleasing combinations of flavor, color, and texture in food. Think of the undesirable effect if plain spaghetti, mashed potatoes, and white bread without butter or garnishes were served as a supper plate. There would be no interesting contrast of color, flavor, or texture. Moreover, these are all starchy foods with limited vitamin and mineral content.

With a little thought, it is easy to plan attractive and nutritious combinations of food. Even the simplest meal can be given a bit of excitement by an interesting combination of well-cooked foods. A famous hostess has said that she always plans her menus first in terms of color. This is one good way to begin meal planning, but flavor and nutritive qualities must not be forgotten. Bread, potatoes, and spaghetti offer no contrast in color and very little in flavor. Instead of this menu, think of a plate with scalloped potatoes, buttered carrots, and broccoli. In this

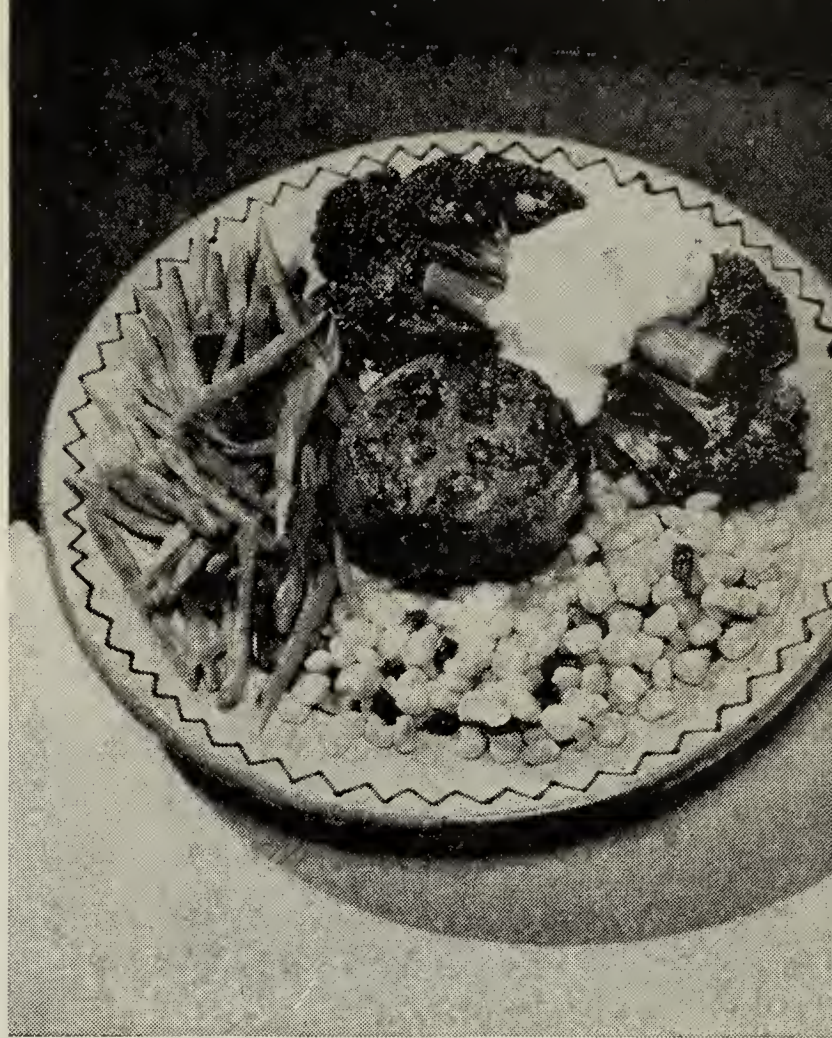
case, the color contrast is excellent, the variety of flavor is good, and the food values are better balanced.

A white vegetable, such as cauliflower, can be made more attractive by garnishing it with a contrasting color. Green peas, chopped parsley, or golden-brown buttered bread crumbs on cauliflower add to the flavor and appearance.

Contrast in texture among the foods served upon the same plate adds to their appetizing quality. Scalloped cabbage, creamed potatoes, and creamed peas make a combination which is uninviting. Avoid the use of more than one scalloped or creamed food on the same plate.

Although a creamed food is very tasty and good to look at, still, too much of a good thing becomes undesirable. On the other hand, avoid combinations where all the foods consist of small pieces, such as cut snap beans, sliced carrots, and buttered peas. The effect is monotonous. A combination of different textures adds considerably to the appearance of a plate. For example, scalloped potatoes, buttered sliced beets, and broccoli served in large pieces makes a nice effect.

Raw vegetables for salads and appetizers. Every diet should include raw vegetables in some form. There are many good ways to serve raw vegetables, especially as appetizers at the beginning of a meal or in a salad. There is no need to worry about loss of vitamins, flavor, or color because of incorrect cooking processes when the vegetables are eaten raw. Of course, they should be clean, crisp, and fresh. Many vegetables which in former times were always cooked for table use are now served raw. Raw vegetables furnish "the makings" for many delightful salads. Grated carrot garnished with a few chopped stuffed olives, or mixed with raisins, and served with mayonnaise makes an excellent salad. Carrots and cabbage grated together make another good salad, rich in the A and C vitamins. Raw cauliflower broken into separate flowerets, marinated with French dressing, and tossed with grated cheese makes another good salad.



Birds Eye Frosted Foods

What food values can you find in this plate luncheon?



GET THE MOST FROM YOUR VEGETABLES

Bureau of Human Nutrition and Home
Economics

Keep vegetables cool until ready
for use.



Cook in boiling water only
until tender.



Season and serve in its own juice.

Young and tender spinach leaves, cut coarsely and combined with tomatoes and thinly sliced onions make a colorful and tasty salad. There are many other good combinations of good raw vegetable salads. Exact recipes are not necessary for the cook with common sense and an imagination. She can devise new salads with the materials at hand. Raw vegetable salads are especially good served with the meat course.

Raw vegetable appetizers add zest to the beginning of a meal. Raw carrot sticks or wedges mixed with fresh celery stalks offer a popular and easily prepared appetizer. Celery sticks stuffed with cream cheese make another good appetizer. Radishes, green pepper rings, wedges cut from broccoli stalks, and cucumber slices are other suggestions for colorful and tasty appetizers.

Some general suggestions for cooking and serving vegetables. Experimentation by food experts has shown that certain general rules should be followed for best results in vegetable cookery.

1. Short cooking time preserves nutrients, flavor, and color. This means the water should be boiling before the vegetables are added, and they should be cooked only until tender. Overcooked cabbage loses its



Wash quickly; don't soak.



Start cooking frozen vegetables while still frozen. Don't thaw first.



Heat canned foods quickly. They are already cooked. Use all the juices.



Cut just before serving.

delicate color and develops a strong taste. Overcooked potatoes become grayish.

2. Yellow vegetables should be cooked quickly in a covered pan with a small amount of water. This method saves vitamins.

3. Green vegetables should be cooked covered. Green vegetables, with the exception of spinach, should be boiled in barely enough water to cover. Spinach should be cooked without the addition of any water.

4. The usual method of preparing most vegetables is boiling, but they can be tasty and nutritious when cooked by other methods. Some vegetables, such as green cabbage and carrots, can be steamed very successfully. Many people like to cook their vegetables in the new type pressure cookers, which are discussed in Unit II.

5. Frozen vegetables should be cooked according to the directions given on the wrapper. These directions are carefully worked out and give excellent results.

6. Any water remaining after vegetables are cooked, particularly mild-flavored vegetables, can be stored in a covered glass jar in the refrigerator and used for soups or gravies.

Recipes for green and yellow vegetables

BUTTERED ASPARAGUS

SERVES 4

20 to 24 stalks of asparagus $\frac{1}{2}$ t. salt
2 T. butter or fortified margarine boiling water

PUT water on to boil.

WASH 20 to 24 stalks of asparagus; remove scales at sides of stalks with a paring knife and cut off tough bottoms. Place in a saucepan and barely cover with boiling water. Add $\frac{1}{2}$ t. salt; cover and cook according to method and time in table on page 79. Test for doneness by piercing with a fork.

DRAIN any liquid off and save for soup; add 2 T. butter or fortified margarine and serve hot.

CREAMED ASPARAGUS

PREPARE 1 c. medium white sauce (page 74).

FOLLOW directions as for buttered asparagus, omitting the butter; place in serving dish or on toast and top with white sauce. Garnish with paprika.

BUTTERED GREEN OR YELLOW STRING BEANS

SERVES 4

1 lb. string beans, whole or cut $\frac{1}{2}$ t. salt
 in pieces boiling water to cover
1 T. butter or fortified margarine

PUT water on to boil.

WASH and stem string beans; leave whole or cut lengthwise and then in half; barely cover with boiling water. Add $\frac{1}{2}$ t. salt.

COVER AND COOK for 15 to 30 minutes. Test for doneness by piercing with the tines of a fork. For the method and time table for cooking vegetables, see page 79.

DRAIN the small amount of liquid off; add 1 T. butter or fortified margarine, and serve hot.

SAUCE FOR GREEN BEANS

$1\frac{1}{2}$ T. butter or fortified margarine 1 t. lemon juice
1 t. prepared mustard $\frac{1}{8}$ t. salt
1 t. sugar $\frac{1}{8}$ t. pepper

SCALLOPED CABBAGE

SERVES 4

2½ c. cabbage, cut in small pieces and cooked as directed for buttered cabbage	2 c. medium white sauce ⅓ c. sharp, grated cheese
--	--

COOK cabbage as for buttered cabbage and drain.

TURN oven to 375° F.

PREPARE 2 c. medium white sauce (page 74) and add $\frac{1}{3}$ c. sharp, grated cheese.

PLACE half of the cabbage in a casserole; cover with half the sauce; repeat, having white sauce on top. Bake in a moderate oven (375° F.) for 15 to 25 minutes. Serve immediately.

BUTTERED CARROTS

SERVES 4

6 medium carrots

boiling water

$\frac{1}{2}$ t. salt

1½ t. butter or fortified margarine

carrots thoroughly and scrape off the thin outer layer of skin; split lengthwise in halves or quarters, or slice crosswise. (Tiny young carrots may be cooked whole.) Barely cover with boiling water; add $\frac{1}{2}$ t. salt.

COVER AND COOK 10 to 30 minutes or until tender. Test for doneness by piercing with a fork. For the method and time table for cooking vegetables, see page 79.

DRAIN and add 1½ t. butter or fortified margarine and serve at once.

NOTE: Celery or peas added to carrots make a good combination.

TOSSED VEGETABLE SALAD

SERVES 4

$\frac{1}{2}$ small head lettuce

1 carrot, sliced

$\frac{1}{2}$ c. greens, endive, watercress, etc.

4 radishes, sliced

2 medium tomatoes, cut in wedges

$\frac{1}{4}$ c. French dressing (page 22)

WASH and prepare vegetables; chill.

COMBINE in a bowl $\frac{1}{2}$ head lettuce, $\frac{1}{2}$ c. endive, watercress, etc., 1 carrot, 4 radishes, and 2 tomatoes.

POUR $\frac{1}{4}$ c. French dressing over vegetables and gently mix. (Page 22-23).

SERVE in a bowl at table or on salad plates.

CARROT AND CELERY CURLS

- WASH** carrots and celery. Remove thin outer skin of carrots and cut in long thin strips.
- CUT** short pieces of celery lengthwise.
- PLACE** carrots and celery in ice water for about 1½ hours to curl. Remove from water, shake dry, and arrange attractively on a relish plate.

BUTTERED CAULIFLOWER

SERVES 4

- 1 medium-sized cauliflower 1½ T. butter or fortified margarine
¾ t. salt

- WASH** cauliflower; remove any brown spots and large outer leaves. If cooked whole, trim base of stock; otherwise, break each floweret apart, leaving small leaves on, and place in saucepan. Barely cover with boiling water. Add ¾ t. salt.
- COVER AND COOK** for 8 to 30 minutes. Test for doneness by piercing with a fork. For the method and time table for cooking vegetables, see page 79.
- DRAIN** and add 1½ T. butter or fortified margarine; serve hot.
- NOTE:** The addition of a few green peas served with the flowerets adds interest in color and flavor. One cup white sauce or cheese sauce poured over gives a pleasing variation.

CORN ON THE COB

SERVES 4

- 8 ears of fresh corn boiling water
½ t. salt

- HUSK** corn and remove silk; place in boiling water; add ½ t. salt.
- COVER AND COOK** for 5 minutes.
- DRAIN** and pile on a large plate or platter; serve hot with butter.

CUT FRESH CORN

SERVES 4

- 6 ears of fresh corn 1 T. butter
¼ c. boiling water ½ t. sugar
⅓ c. milk ¼ t. salt

- CUT** corn off the cob.
- PLACE** corn in saucepan; add ¼ t. salt, ½ t. sugar, and ¼ c. boiling water.
- COOK** for 3 minutes. Add ⅓ c. milk, 1 T. butter, and F. G. pepper if desired; cook for 2 minutes. Serve hot at once.

AU GRATIN ONIONS

SERVES 4

8-12 medium-sized onions 1½ c. medium white sauce (page 74)
⅓ c. grated, sharp cheese

COOK onions as for buttered onions; drain.

TURN oven to 350° F.

PREPARE 1½ c. medium white sauce and add ⅓ c. grated, sharp cheese.

ARRANGE onions in a baking dish; cover with cheese sauce and bake in a moderate oven (350° F.) for 25 minutes.

BUTTERED ONIONS

SERVES 4

8-12 medium-sized onions boiling water
¾ t. salt 1½ T. butter or fortified margarine

PEEL off outer skin of onions and cover with boiling water. Add ¾ t. salt.

COVER AND COOK for 15 to 35 minutes, or until tender when pierced with a fork.

DRAIN and add 1½ T. butter or fortified margarine; serve hot.

CREAMED ONIONS

SERVES 4

8-12 medium-sized onions 1½ c. medium white sauce (page 74)

COOK onions as for buttered onions.

PREPARE 1½ c. medium white sauce, add onions, and serve hot.

BUTTERED SPINACH

SERVES 4

1 lb. spinach 1½ T. butter or fortified margarine
½ t. salt

WASH spinach carefully under running water; remove discolored leaves, cut off root ends, and place in a saucepan. Drain. Add ½ t. salt.

COVER AND COOK for 7 to 9 minutes. Chop slightly with a knife, drain, add 1½ T. butter or fortified margarine, and serve hot.

CREAMED SPINACH

SERVES 4

1 lb. spinach 1½ c. medium white sauce (page 74)
½ t. salt 1 t. grated onion

COOK 1 lb. spinach as directed for buttered spinach.
 PREPARE 1 c. medium white sauce; add 1 t. grated onion and spinach. Serve hot.

SPINACH SOUFFLÉ

SERVES 6

1 c. cooked, chopped spinach	1/2 t. salt
1 c. milk	1/4 t. pepper
3 T. flour	1 T. chopped onion
3 T. butter or fortified margarine	1 t. lemon juice
3 eggs	1 t. lemon rind

MIX 3 T. flour, 1/2 t. salt, and 1/4 t. pepper with 1/2 c. milk. Place in saucepan. Add remaining 1/2 c. milk and 3 T. butter or margarine; cook until thick and smooth, stirring constantly.

TURN oven to 350° F. Grease 6 baking cups.

BEAT 3 eggs slightly. Add 1 T. chopped onion, 1 t. lemon juice, 1 t. lemon rind, and 1 c. spinach.

COMBINE the two mixtures. Divide evenly in 6 baking cups; place in a pan of warm water, and bake in a moderate oven (350° F.) for 25 to 30 minutes.

REMOVE from cups and place upside down on a plate; garnish with buttered carrots (page 280) and water cress. See illustration on page 271.

BAKED ACORN SQUASH

SERVES 4

2 acorn squashes	1/2 t. salt
2 T. butter or fortified margarine	2 t. brown sugar

F. G. pepper

TURN oven to 400° F.

WASH squashes thoroughly and either bake whole or cut in halves.

Whole

Place on a pan and bake in a moderately hot oven (400° F.) until tender. Cut in halves and remove seeds; equally divide 2 T. butter or fortified margarine, 1/2 t. salt, 2 t. brown sugar, and F. G. pepper over 4 halves; return to oven and brown.

Cut in half

Remove seeds; add butter, salt, sugar, and pepper before baking. Bake in moderately hot oven (400° F.) until tender.

BUTTERED SUMMER SQUASH
(Zucchini, pattypan, yellow crookneck)

SERVES 4

1¼ to 1½ lb. squash	F. G. pepper
¾ t. salt	2 T. butter or fortified margarine
small amount of boiling water	

WASH squash well; cut into pieces. If squash is young, the skin need not be removed; if mature, the skin and seeds should be removed.

ADD a very small quantity of boiling water and ¾ t. salt.

COVER AND COOK for 10 to 20 minutes, or until tender. Drain; add 2 T. butter or fortified margarine and F. G. pepper. Serve immediately.

NOTE: The addition of a small amount of lemon juice is pleasing to some.

BAKED WINTER SQUASH
(Hubbard or cushaw)

SERVES 4-6

2½ to 3 lbs. squash	½ to ¾ t. salt
2½ to 3 T. butter or fortified margarine	F. G. pepper

TURN oven to 400° F.

WASH squash and bake whole, or cut in half with a cleaver or heavy butcher knife and remove seeds before baking. Place cut sides down on a greased baking sheet.

BAKE in a moderately hot oven (400° F.) for 40 to 60 minutes, or until tender.

CUT squash into 4 pieces; add ½ to ¾ t. salt and F. G. pepper. Place 2½ to 3 T. butter or fortified margarine on top and serve at once.

NOTE: Squash may be scooped out of the shell, mashed, and seasoned with salt, pepper, and butter. Can be kept hot in top of a double boiler.

BUTTERED TURNIPS
(Yellow or white)

SERVES 4

6 medium-sized turnips	¾ t. salt
1¾ t. sugar	1½ T. butter or fortified margarine

WASH turnips; pare, quarter, and slice or dice.

COVER AND COOK in small amount of boiling water with ¾ t. salt and 1¾ t. sugar. Cook for 10 to 15 minutes, or until tender. Test for doneness with a fork.

DRAIN
NOTE:

and add 1½ T. butter or fortified margarine and serve hot. Turnips may be mashed and butter added. Creamed turnips are diced and cooked as directed for buttered turnips and added to medium white sauce.

HARVEST SUPPER



Swift and Company

SERVES 4

8 link sausages	1 t. butter
1 large or 2 small acorn squash	½ t. salt
2½ c. kernel corn	1 t. sugar
1 c. tomatoes	

PREPARE acorn squash as directed on page 283 and bake in a moderately hot oven (400° F.) for 30 to 45 minutes or until tender.

MIX 2½ c. kernel corn, 1 c. tomatoes, ½ t. salt, and 1 t. sugar and place in a greased baking dish. Dot with 1 t. butter.

BAKE in a moderately hot oven (400° F.) for 30 minutes.

PLACE 8 link sausages on broiling pan and brown on both sides.

ARRANGE the corn and tomatoes across the serving plate, the cut squash at one end, and the sausage at the other end. Garnish with parsley.

HOLLANDAISE SAUCE

MAKES $\frac{3}{4}$ CUP

2 egg yolks, well beaten	$\frac{1}{8}$ t. salt
1 T. lemon juice	4 T. butter or fortified margarine
$\frac{1}{4}$ c. cream, sweet or sour	

BEAT 2 egg yolks, 1 T. lemon juice, and $\frac{1}{8}$ t. salt together; add $\frac{1}{4}$ c. cream.

MELT 4 T. butter or fortified margarine in the top of a double boiler; add egg mixture and cook over boiling water, stirring constantly, until thick.

REMOVE from heat and beat until light. Serve at once on cooked vegetables such as broccoli and asparagus.

MOCK HOLLANDAISE SAUCE

1 c. milk	3 T. butter or fortified margarine
2 T. flour	$1\frac{1}{2}$ T. lemon juice
$\frac{1}{2}$ t. salt	2 egg yolks

MELT 3 T. butter or margarine in the top of a double boiler. Add 2 T. flour and $\frac{1}{2}$ t. salt; blend. Slowly add 1 c. milk and cook until thick and creamy, stirring constantly.

BEAT 2 egg yolks and $1\frac{1}{2}$ T. lemon juice well; add, just before serving, to the above mixture.

COOK for 2 minutes, and serve at once.

CLASS ACTIVITIES

1. What vegetables are most popular among the class members? What are the most popular methods of preparation? Let each member of the class vote for the three vegetable dishes which she likes best. For example, one list might read, "battered beans, raw carrot salad, and mashed potatoes." Record the votes for the different vegetable dishes on the blackboard. How many vegetables are listed? What nutrients are secured from the most popular choices?

2. What vegetables do you eat daily? Do you get one serving of a vitamin A vegetable every day?

3. In this study, have you learned to like a new vegetable or a new way of preparing one?

4. Plan a "spell-down" game with vegetables. Choose sides. Your teacher will give you a type of food value: vitamin A, vitamin C, or hearty vegetable. If you cannot answer at once with a correct name of a vegetable, you are "down." You may not answer with a vegetable name which was previously used until 4 other vegetables have been named for that type.

5. Using a green or yellow vegetable, have a lesson when the vegetable will be prepared in six different ways. After you have sampled the results, vote for the most popular way of serving it.
6. Invent a new vegetable salad.

FUN WITH FOOD AT HOME

1. Prepare a vegetable in a way with which your family is not familiar. Report your success.
2. For some special occasion, prepare and serve a vegetable gelatin salad which conforms to a color scheme. For example, you might make a green salad from lime gelatin and green vegetables for St. Patrick's Day.

2. Vegetable soup: a meal in itself

Rich soup with generous amounts of vegetables, meat broth, and other ingredients is correctly called "a meal in itself," not only because it is hearty and satisfying, but because it supplies a variety of nutrients. Small servings of soup may be used as an appetizer course, but large servings make good main dishes for luncheon or supper.

In kitchens of the past, the soup pot always stood ready on the back of the wood or coal range. Into the soup went leftover meat, broth, and vegetables. Hot and savory soup was ready at a moment's notice.

Types of soups. In general, soups can be classified into two groups, cream soups and clear soups. Recipes for both kinds of soup include vegetables as important ingredients. Our study of cream soups in Unit 2 (pages 83 to 90) showed that these soups are especially nutritious. They are particularly good for people, young or old, who do not like to drink milk.

Chowder is a cream soup variation in which coarsely cut vegetables or sea food has been added. The term "chowder" is derived from a French word, *chaudiere*, meaning a big cooking pot. French fishermen who settled in Newfoundland brought the term to this continent. Originally, chowder always contained fish or other sea food, but corn and potato chowder are now popular.

Clear soups are so-called because they contain no milk, and not because the liquid is always free from other ingredients. Clear soups may be made with meat stock, vegetable stock, or tomato juice and may have chopped vegetables, diced meat, noodles, rice, or barley as added ingredients. Clear soups offer an excellent opportunity for the use of leftovers, and, like salads, give the junior homemaker a chance to use her ingenuity in combining good flavors.



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The deep-well cooker is excellent for the preparation of soups and other foods prepared by simmering or braising.

The stock is now ready for use in making soups.

Variations in meat stock. Variations in flavor and color are secured by the use of different kinds of meat and by the method of preparation.

White stock is made from veal soup bones.

Brown stock is made by cutting the meat from the beef bone and browning it in hot fat in the kettle in which the stock is to be made.

Bouillon is made from clarified brown stock. To clarify, heat stock slightly and add one egg white and one crushed eggshell for each quart of stock. Stir constantly until the stock begins to boil; then continue boiling for 2 to 5 minutes without stirring. Add a cup of cold water, remove from fire, let stand 15 minutes, and strain.

Consommé is made from stock which included two or more kinds of meat. The stock is lightly seasoned and clarified.

Variations in vegetable soup recipes. Most vegetable soups are made with meat stock. This is a simple process after the stock has been made. All that is necessary is to add the chopped vegetables and flavorings to the stock and boil gently until the vegetables are done and good flavor has been developed. Onions, celery and celery tops, carrots, peas, snap beans, and corn are especially good in this kind of soup. At the green

General directions for making meat stock. Good meat stock can be made from beef shin bone or knuckle, veal knuckle, lamb shoulder, chicken, or turkey bones. Both bone and meat are necessary for flavor.

1. Have the soup bone cut or cracked in several places so that the marrow can escape during the cooking process.

2. Cover the bone with water (cold or hot), bring to a boil, cover tightly, reduce the heat, and simmer for at least 2 hours.

3. Remove the bone and strain the liquid.

4. Cool and skim off fat. This is easily accomplished by chilling the stock until the fat congeals on the surface and can be scraped off. The

vegetable counter today we can buy pound bags of cut vegetables for soup. Fresh, leftover, or canned vegetables may be used. The amount of vegetable added depends upon personal preference. Besides the vegetables, other ingredients such as rice, barley, or "alphabet" macaroni are sometimes added. Very often, meat from the soup bone and other leftover meat are also added.

Variations in flavor are obtained by using such flavors as bay leaves, marjoram, thyme, or other herbs. In some recipes certain ingredients such as onion, celery, salt, and pepper are cooked with the meat stock.

Potatoes are added in some soups for bulk and thickening quality. In some soups, the potatoes are mashed in their own liquid and added to the other ingredients. This is quite the opposite of recommended procedure in using potatoes one hundred years ago. An old cookbook says, "Potatoes, if boiled in the soup, are thought by some to render it unwholesome, from the opinion that the water in which potatoes have been cooked is poison." Cooks of the nineteenth century never heard of vitamins or minerals, and so they threw away many valuable nutrients. Modern cooks, who are nutrition-wise, save the liquid in which potatoes and other vegetables have been cooked and use it in soups and stews. A very good soup can be made by combining tomato juice and meat stock and adding flavoring and vegetables. When using canned vegetables in soups, always use the liquor from the cans.

Turkey and chicken soups. Bones from turkey, chicken, or duck can be used to make stock in the same way as veal or beef bones. For best results the bones should be broken up. Naturally, this requires straining through a fine sieve so that no tiny splinters will get into the soup.

Turkey soup is generally the last appearance of the noble bird after the Christmas or Thanksgiving dinner. This is getting the most out of the leftovers!

Using canned soups. In the early days of commercial canning, the homemaker-cook who used a can opener when she made her soup was referred to as lazy. Very good soups can be made from the canned product, and the person who is pressed for time may find it advisable to use them. There are many ways of "dressing up" the canned soups by combining different kinds and by adding extra ingredients. The manufacturers of these soups furnish excellent suggestions for this procedure, and many recipes for the use of canned soups can be found in modern cookbooks.

Accompaniments and garnishes for clear soups. Any soup is more attractive if it has a pleasing garnish. Consommé and bouillon are

CLASS PROJECT: VEGETABLE SOUP LUNCHEON.

Plan a luncheon which includes a vegetable soup with meat stock, a bread or cracker accompaniment, a beverage, and a milk dessert.

1. Watch a demonstration of making meat stock, including both brown and white stock. Because of the long cooking time, this demonstration will necessarily require two days. On the second day the demonstration should include the making of bouillon or consommé and a vegetable soup with the stock.

2. Study the recipes on the opposite page and the general directions given in this unit.

3. Make a work schedule which includes making the soup, the accompaniment, the beverage, the dessert, and serving the luncheon.

4. After the luncheon, hold a clinic to discover the good points and the poor points in your cooking, serving, and eating manners.

garnished by thin slices of lemon or avocado, some gratings of raw carrot, or cooked vegetables cut in fancy shapes. Vegetable soups may be decorated with chopped parsley, a spoonful of whipped cream, or a few crisp kernels of a dry cereal. The garnish should be added just before the soup is served.

Accompaniments for soups include crisp wafers, toasted bread sticks or croutons, melba toast, or hard rolls. The crisp texture is especially good with a rich meat-and-vegetable soup.

Recipes for vegetable soups

CREAMY CORN CHOWDER

SERVES 6-8

$\frac{3}{4}$ c. navy beans	1 c. tomatoes
4 c. water	$1\frac{1}{2}$ t. salt
1 c. corn	2 T. butter or fortified margarine

SOAK $\frac{3}{4}$ c. navy beans in 4 c. water five to six hours.

SIMMER until nearly tender.

ADD 1 c. corn, $1\frac{1}{2}$ t. salt, 1 c. tomatoes, and 2 T. butter or fortified margarine and simmer until beans are soft and tender.

NOTE: If chowder is too thick, add $\frac{1}{4}$ c. to $\frac{1}{2}$ c. additional water.

CLASS ACTIVITIES

1. Compare the cost of canned soup and homemade soup. Make this comparison both for a cream soup and a vegetable soup with meat. Remember to

VEGETABLE SOUP



1. To make stock, cut meat off 4-pound beef soup bone and brown in fat; add 1 t. salt and 2 quarts cold water. Add bone, cut in several pieces. Let stand $\frac{1}{2}$ hour; add 1 quartered onion. Cover and simmer for 2 hours.



2. Add vegetables waiting in a bowl: 2 c. tomatoes, 6 sprigs parsley, 6 sliced carrots, 2 c. cut green beans, 1 c. diced potatoes, $\frac{1}{2}$ c. chopped celery. Include onion, cabbage, or green pepper if you like.



Better Homes and Gardens Magazine

3. Add barley or rice, but remember it swells as it cooks; 4 T. are enough for this recipe. Simmer barley, or rice, and vegetables 1 hour to blend the flavors well. Skim surplus fat from the surface of the soup.



4. Ladle out the rich, steaming stock, studded with morsels of tender meat and bites of vegetables. You will have enough delicious soup to serve 8 to 10. Steaming soup is so good on a cool fall day, for a meal starter, or for a main dish.

include the cost of ingredients which must be added to the commercially canned soup, and to base your figures on the same amount of soup in each case.

2. What soups are especially popular among the members of the class? Does anyone have a soup recipe from a foreign country?

3. Plan three luncheon menus with soup as the main dish. Try to balance the food values.

FUN WITH FOOD AT HOME

1. Have a "soup-making party." Perhaps this could be managed in a regular class period. Find several soup recipes which are considered different and special. These might include Italian *minestrone*, Russian beet borsch, Scotch broth, Cape Cod clam chowder, and French onion soup.

2. Serve hot vegetable soup with a cheese wafer accompaniment for refreshments after an outdoor party in the winter.

3. Serve your family with a soup which is new to them.

4. Add a basic recipe for vegetable soup to your collection of recipes.

A SUMMARY OF YOUR STUDY OF THE GREEN AND YELLOW VEGETABLES

In your study of this unit you should have acquired certain basic information and skills with relation to green and yellow vegetables.

Basic cookery procedures

Principles of vegetable cookery.

Cooking green vegetables.

Cooking yellow vegetables.

Making meat stock.

Skills in food preparation

Green and yellow vegetables.

Vegetable soup.

Consommé.

Bouillon.

Selection and care of vegetables

Strictly fresh vegetables are best.

Fresh, crisp vegetables most desirable.

Storing vegetables properly.

Crisping wilted vegetables.

Nutrition facts

Value of carotene.

Relation of color to vitamin A value.

Preventing loss of vitamin A in cooking.

WHAT DO YOU KNOW ABOUT THE GREEN AND YELLOW VEGETABLES?

The following tests will help you to find out how much you know about the green and yellow family.

To test your knowledge of nutrition

On a separate sheet of paper write the number of each question, and opposite the numbers write the correct answers. **Do not write in this book.**

1. Which of the following does not contain carotene?

carrots

broccoli

sweet potatoes

beets

2. Which of the following processes prevents loss of vitamin A in green and yellow vegetables?

(a) Starting in cold water.

(b) Cooking quickly in boiling water.

(c) Storing in warm, dry place.

(d) Paring or chopping at least two hours before a meal.

3. Which of the following salads is richest in vitamin A?
potato carrot and cabbage cauliflower and pea
4. Which of the following will you choose for vitamin A value?
(a) white corn or yellow corn
(b) summer squash or winter squash
(c) white potatoes or sweet potatoes
(d) green celery or bleached celery
(e) new cabbage or old cabbage
(f) swiss chard or head lettuce
5. Which of the following soups contains the greatest vitamin A value?
(a) cream of tomato (b) consommé
(c) chicken noodle (d) vegetable (carrots, peas, beans, parsley, and onions)

Which vegetable plate will you choose?

On a separate sheet of paper write the number of each question, and opposite the numbers write the letters (a , b , etc.) to indicate the correct answers. **Do not write in this book.**

1. Which of the following food combinations will make a well-balanced and attractive luncheon plate?
 - (a) buttered beans
broccoli
creamed peas
 - (b) summer squash (yellow)
candied sweet potatoes
creamed corn
 - (c) broccoli
corn pudding
buttered sliced carrots
 - (d) sliced tomatoes
spinach
baked potatoes
2. Which of the above menus is richest in vitamin C?
3. Which of the above menus is richest in vitamin A?
4. Which of the above menus contains the least energy value?

REFERENCES FOR FURTHER READING

- Brown, Cora, Rose, and Bob, *The Vegetable Cookbook*. J. B. Lippincott Company, 1939.
- Davis, Adelle, *Vitality Through Planned Nutrition*. The Macmillan Company, 1942. Pp. 111-152.
- Given, Meta, *The Modern Family Cookbook*. J. G. Ferguson and Associates, 1943. Pp. 764-838.
- Mabon, Mary Frost, *A Meal in Itself: a Book of Soups*. Duell, Sloan, and Pearce, 1944.
- Shephard, Katherine, *First Steps in Cooking*. The Macmillan Company, 1946. Pp. 28-37, 104-118.

7

The Protein Foods

The protein group of foods is the last of the seven basic food groups in our study. Not all foods which are good sources of protein are included in this group. Milk, which is rich in protein, is also rich in other nutrients and is classified in a group by itself. Foods belonging in the protein group, as shown on the chart of the seven basic foods, are meat, poultry, fish, eggs, dried peas, and dried beans. Since we have already discussed dried legumes in our study of hearty vegetables, we will include only eggs and the flesh foods—beef, veal, pork, lamb, chicken, etc.—in this unit of work.

Since proteins are the builders and repair agents in the body, it is essential that they be included in the diet in adequate amounts. Nutritionists recommend that we eat one serving daily of meat, poultry, or fish; four eggs or more every week; and two or more servings of dried legumes, nuts, or peanut butter every week. For most people, this is not a difficult rule to follow as far as personal preference is concerned. However, the flesh foods and eggs rank high in cost and may be excluded from the diet for that reason. It is advantageous to know which ones are least expensive and how to prepare them attractively. A good beefsteak ruined by wrong methods of cooking is disappointing and wasteful. The very best quality of meat can be ruined by poor cooking, and a poor-quality cut can be made very tasty indeed by correct methods of preparation. Obviously, it is important to know the less tender cuts and how to prepare them.

In this unit of study, we shall learn how to select the protein foods advantageously for the budget, how to store them properly, and how to prepare them in appetizing dishes; and we shall learn their importance in the diet.

1. Why should we eat eggs, meat, fish, and poultry?

If we wished to eat by rule alone, we could measure our protein foods by the ounce to be sure we get enough of them every week. But it is more interesting to know *why we need protein*, in which foods it is most abundant, and what other nutrients are contained in the same foods.

The protein needs of the body. Our bodies contain a large amount of protein, about 18 per cent by weight. This is greater than any other substance in the body with the exception of water. Muscles, skin, hair, nails, nerves, brain, and tissues of the digestive organs are made of protein. In fact, the structure of all body tissues is protein.

An adequate supply of new protein day by day is necessary to provide for the development of new tissues and to replace old, worn-out tissues. Babies, children, and all young people who are still growing must have a generous supply of protein in order to develop normally. Young babies receive their protein entirely through milk. As they grow older, other protein foods are added to their diet. Usually, eggs are introduced early because egg protein, like that of milk, is easily digested.

A generous amount of protein is needed during the entire growth period for the purpose of building new tissues, but the need for protein does not end when maturity is reached. It is required for the replacement and repair of worn-out tissues in all parts of the body. As long as there is life in the body, protein is vitally important and should be eaten in generous amounts.

The proteins in eggs, meat, fish, and poultry. In our previous study we learned that proteins differ in their character and their ability to function in the body. Incomplete proteins, such as those found in whole-grain cereals, must be supplemented with complete proteins found in other foods in order to function in the body. Eggs, meat, fish, and poultry contain generous amounts of complete proteins and, for that reason, are exceedingly valuable in the diet.

Proteins consist of different combinations of amino acids in different foods. For instance, the protein of milk differs from that of egg white. Each protein is a complex combination of amino acids. Many of these individual acids are known, but there are many that have not yet been identified by scientists. It is not necessary for us to become acquainted with the various complex combinations of acids in different foods. We need only practical information about proteins which we can apply to the selection of our everyday food.

Remember that we need the foods with complete proteins every day, not only for their own nutritive value, but as a supplement to the foods with incomplete proteins. For example, a breakfast consisting of orange juice, whole-wheat toast, and coffee does not furnish protein of the same quality as the same breakfast with egg or milk.

Proteins furnish energy. When more protein is eaten than can be used immediately for building and repair work in the body, the excess may be stored in the liver for use when the intake of protein is not adequate. This is called storage protein. However, the amount of protein which can be stored in the liver is limited. In case there is more protein than can be used for building, repair, or for storage, the excess is transformed into glucose or fat, depending upon the nature of the amino acids. The glucose and fat are then used for energy. But if more protein is eaten than is needed for building, repair, storage, or energy, then it is stored as body fat which may at some future time be needed for energy.

It should be remembered that protein is used first of all for building and repair, next for storage, then for energy, and last for body fat. Some people who wish to reduce their weight may cut down their protein to a dangerously low point. Everyone should eat enough protein to meet the body needs for building and repair work.

Nutritive values in eggs. The smooth, bald exterior of an egg gives no hint of the bountiful riches inside. In a standard 2-ounce egg about 13 per cent is protein, a very high-quality protein which is easily digested. If you are a 16-year-old girl, one egg will supply you with about $\frac{1}{12}$ of your protein requirements for the day. This is twice as much as you can obtain from a slice of toast or a dish of cereal, and nearly as much as contained in an 8-ounce glass of milk. If your breakfast includes an egg, a dish of cereal, a slice of toast, and a glass of milk, you will eat enough protein to meet about $\frac{1}{4}$ of your daily requirement. A good way to start the day!

In addition to protein, an egg contains about 11 per cent fat, chiefly in the egg yolk. Thus an egg is good fuel food. But remember that you must eat the egg *yolk* to obtain the fat content.

Eggs serve not only as builders, repair agents, and fuel in the body but also as protective foods because of their vitamin and mineral content. We have learned that iron is an essential nutrient, needed for general well-being, vitality, and for the prevention of anemia. Egg yolk is rich in iron, and nutritionists recommend at least 3 or 4 eggs per week. The lack of iron in milk is one reason why it is not an entirely

perfect food. To obtain the necessary amount of iron for health, it would be necessary to drink about 70 quarts of milk every day. Since babies depend upon milk for food, it is advisable to begin feeding them egg yolk as early as the third month in order to supply them with their quota of iron. Other iron-rich foods, whole-wheat cereals, puréed vegetables, fruits, and liver can be added to their diet a little later.

Calcium is another important nutrient found in eggs, chiefly in the yolks. Although eggs are not nearly as rich in calcium as milk, they are considered a good source.

Another mineral, closely associated with calcium in the body, is phosphorus. You may be surprised to learn that your body contains from 1 to 1½ pounds of phosphorus. It is an essential part of every cell in the body, giving rigidity to the bones and teeth and aiding in the digestive processes. Probably you obtain enough phosphorus from your foods, because it is present in many of them, but remember that it can not function properly unless you eat enough calcium. About 75 per cent of the phosphorus used in your body is used in combination with calcium. Eggs are a good source of both calcium and phosphorus.

Besides their valuable mineral content, eggs are also rich in vitamins. Most of the known vitamins are contained in eggs with one notable exception—vitamin C. The amount of vitamins present in eggs depends upon the feed of the chickens and the season of the year. Investigation has shown that a winter egg has only about half as much vitamin A as a summer egg. There are variations in the amount of other vitamins contained in eggs, but, for everyday purposes, we need only remember that eggs are rich in vitamins except for C.

Nutritive values in meat. The high protein content in meat, ranging from 16 to 22 per cent, establishes it as one of the chief building and repair foods. The proteins are complete, containing all the essential amino acids.

The energy value of meat varies with the parts of the meat which are eaten. If one eats only the lean meat, the calorie count is not nearly so great as when the fatty portions are eaten.

Meat is a good source of some minerals and a poor source of others. Iron and phosphorus are present in generous amounts in meat, but calcium is lacking. The special meats such as liver and heart are especially rich in iron. Copper, necessary in order that iron can be used to make hemoglobin, is found in liver and other iron-rich foods. Fortunately, iron and copper, which must be used together in the body, are found in the same foods.

Meat is an excellent source of some vitamins, but the content varies in different meats. Liver and other glandular meats are rich in the B complex: thiamin, riboflavin, and niacin. The lean muscle meats also furnish appreciable amounts of the B vitamins. Pork is especially rich in thiamin: one pork chop will furnish the entire daily requirements. Liver is a good source of vitamins A and D.

Nutritive values in poultry. Food values in poultry do not differ greatly from those in meat. Complete protein, fat, and the A, B, and D vitamins are present in varying amounts. Iron and phosphorus are also present in appreciable amounts. The vitamin and mineral content, as in meats, is richest in the liver and heart.

The fat content of different fowl varies greatly. Chicken contains the least fat and goose the most. The fat of older birds has a more pronounced flavor than that from younger birds, a flavor that is sometimes objectionable, especially in geese.

Nutritive values in fish. Fishery products provide another food rich in complete proteins and other nutrients. All fish are good sources of niacin in the vitamin B group, and fish-liver oils are rich in vitamins A and D. Cod and halibut liver oils are important sources of these two vitamins. Fish are also good providers of iron and phosphorus. Calcium is present in smaller quantities.

Ocean fish and other sea foods contain a nutrient which is valuable in the prevention of goiter—iodine. Not many foods contain this mineral which is so important to physical and mental health. Sea foods and iodized salt are the best sources of iodine. Remember that only ocean fish will give you iodine. Fresh-water fish are not only lacking in iodine, but have been known to develop goiters themselves!

CLASS ACTIVITIES

1. Let each member of the class plan a day's meal in which there is an adequate amount of protein. Compare menus.
2. "Good egg" is a slang phrase meaning a person who is honest, good-natured, and dependable. Explain how this meaning might have been based on the nutritive values of an egg.
3. Make a list of ten questions about nutritive values of eggs, meat, fish, and poultry which you think members of the class should be able to answer. Give your questions to your teacher. Choose sides for a "spell down." If you miss one of the questions, you must sit down.
4. Check up on the protein in your daily diet. Do you have enough? The tables in the back of the book will help you to determine how much you eat and how much is recommended.

2. *How will you have your eggs?*

It is fortunate that a food which is so important nutritionally can be prepared in many attractive and appetizing ways. Eggs can be soft-cooked, hard-cooked, poached, fried, scrambled, or made into an omelet. They can be combined with other ingredients to make custards, soufflés, salads, or baked products.

This wide variety of uses for eggs makes it easy to include them in the daily menu. A poached egg for breakfast, egg salad for lunch, or sponge cake for dinner can provide you with your daily egg. Of course, you would have to eat a very large piece of sponge cake to obtain the equivalent of one egg, since 4 or more eggs are required for the whole cake. It would be advisable to eat an additional food such as soufflé or custard in order to get your whole egg, rather than to eat a sixth of a sponge cake!

In this problem we shall learn several ways of preparing egg dishes. Already we have learned how to make custards and soufflés, and we will find that the principles of egg cookery are the same for all dishes in which eggs are the chief ingredient. Since the quality of the raw eggs is important, we shall study the guides to the selection of good eggs, and we shall learn how to store them properly.

Guides for buying eggs. The surest way to judge the quality of an egg is to break the shell and observe the behavior of the yolk and white. An even better test is to taste it! Obviously, these methods of judging eggs are not practical in the grocery store. We must rely on other aids in selecting eggs. Before discussing buying guides which can be used in the market, let us learn the characteristics of a good egg.

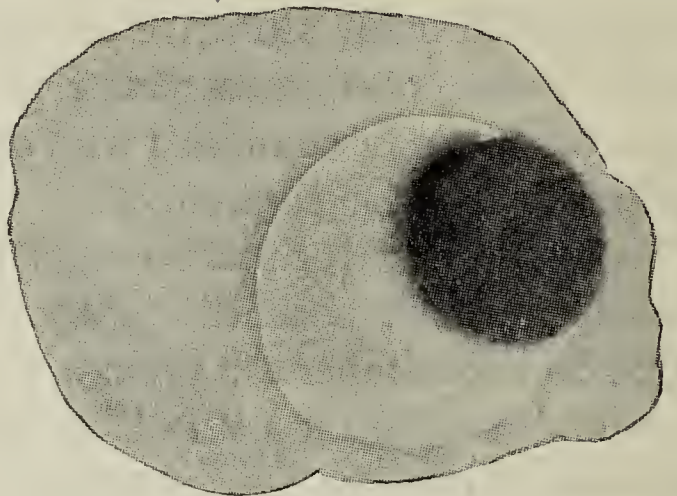
When a fresh egg is broken onto a plate, the yolk stands up in nearly semicircular form, and the white spreads very little, adhering rather closely to the yolk. In an older egg, the yolk flattens out considerably, and the white spreads widely. These differences are shown in the illustrations on page 300. Briefly, a fresh egg stands up well and a poor one stretches out. As eggs deteriorate, both the yolks and the whites become thinner and more watery. This makes it more difficult to separate the yolk from the white as there is a tendency for the yolk to break easily. Most important, the change in consistency is accompanied by a serious deterioration in flavor.

Freshness is the most important factor affecting the flavor of an egg. However, freshness does not always depend upon age. An egg which is a month old may be fresher and better in flavor than one which is

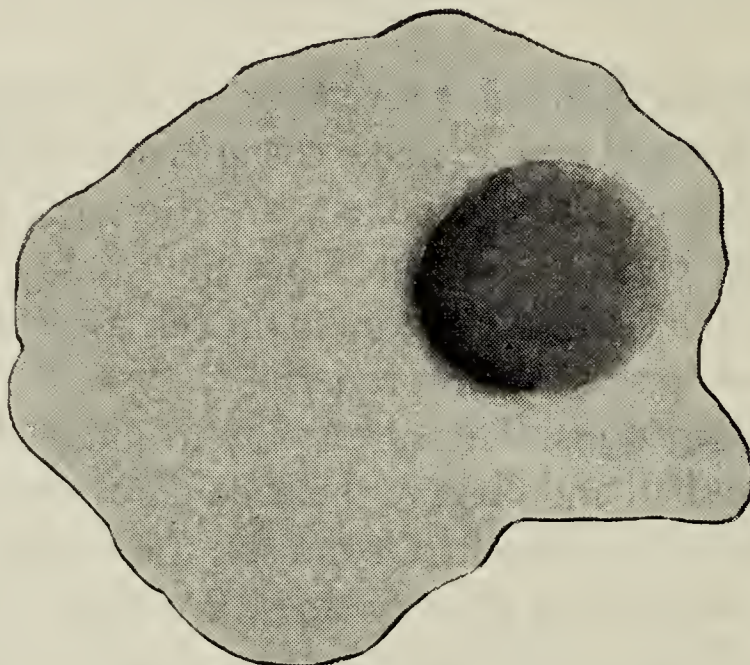
THE FRESHNESS OF AN EGG CAN BE DETERMINED BY THE WAY IN WHICH IT SPREADS OUT AFTER IT IS BROKEN ONTO A PLATE



1.



2.



3.

1. A good fresh egg has a large amount of thick white which does not spread much and a full well-rounded yolk which stands up well.

2. An egg which is not so fresh has a flattened yolk and an increased amount of thin white.

3. A stale egg has a decidedly flattened yolk and thin white which spreads over a much larger area.



U. S. Department of Agriculture

This label on a box of eggs indicates that the eggs have been inspected and graded by federal graders.

only three or four days old. The temperature at which the eggs have been kept accounts for this difference. An egg ages rapidly at warm temperatures (above 68° F.), and a stale, undesirable flavor develops. Eggs kept at cool temperatures remain fresh and good much longer. The farmer who keeps eggs on the back porch for several days in warm summer weather is destroying their eating quality. A few days in the sun can do more damage than weeks under refrigeration.

Color of the egg shell is not important. Some people prefer brown eggs and some prefer white eggs, but investigation has shown the color of the egg shell has nothing to do with flavor or nutritional quality. If you pay more for the color which you prefer, you are wasting your money. After the egg has been removed from its shell, no one can tell whether the color was brown or white. Brown eggs do not always have darker yolks. Color and flavor of the yolk is affected chiefly by the feed given to the chicken which lays the egg.

Store your eggs properly. Eggs should be kept cool from the time they are laid until they are used. Fresh eggs, stored in a kitchen cabinet

CLASS PROJECT: BREAKFAST WITH EGGS.

Plan a well-balanced breakfast including soft-cooked, poached, or fried eggs.

1. Watch a demonstration of preparing eggs in each of the three ways mentioned above. Study the recipes on pages 305 to 307 and read the general discussion in this unit.

2. Plan a breakfast that can be prepared in a minimum of time. Include table setting and eating manners in your discussion.

3. Make a work schedule which will get the breakfast on the table, hot and well cooked, at a definite time.

4. Whether you cook, set the table, serve, or eat the breakfasts, observe them carefully for eye-appeal. Observe eating manners also.

5. Hold a breakfast clinic to point out strong points and weak points in your breakfast project.

near the range, will deteriorate rapidly. The intelligent homemaker buys good-quality eggs and keeps them under refrigeration until she is ready to use them.

If you produce your own eggs, your responsibility for freshness begins as soon as they are laid. When an egg is laid, its temperature is about 104° F. It should be taken from the nest as soon as possible and put in a cooling room or refrigerator. If left in the nest, other hens may sit upon it and keep it at body temperature. Poultry houses are often very warm in the summer. Avoid leaving the eggs in a temperature above 60° F.

On a modern poultry farm eggs are gathered every two or three hours and removed to a cooling room, which is held at a temperature between 40 to 50° F. The eggs are moved by refrigerated trucks to storage houses where the temperatures are low and the air is humidified to prevent the eggs from drying out. Proper storage is important at every point in handling eggs.

Principles of egg cookery. The basic principle for all egg cookery depends upon the effect of heat on protein. High temperature and rapid cooking cause protein to shrink and toughen. If eggs are cooked in boiling water, the whites become tough and rubbery and the yolks become dark and mealy. When fried in hot fat, the egg white becomes very tough and even crisp around the edges. Soft custard, cooked over a hot flame, will curdle, and custard baked in a hot oven is tough and “weeps” a watery liquid.

The fundamental principle is clear: AVOID HIGH TEMPERATURES IN



U. S. D. A.

How many of the basic seven food groups are included in this appetizing breakfast?

EGG COOKERY. This applies both to eggs cooked as “eggs” and to dishes in which eggs are the principal ingredient.

Eggs for every appetite. Eggs can be served in such a variety of ways that everyone can be pleased. The simplest method of preparation is by cooking them in the shell. People who do not understand protein cookery may cook them in boiling water and call them “boiled eggs.” Eggs cooked in this fashion are sure to be tougher and more rubbery in quality than when they are properly cooked in hot water kept *below* boiling temperature. The correct names for eggs prepared in this manner are “soft-cooked” and “hard-cooked” eggs. Have you ever noticed a greenish color on the yolk of a hard-cooked egg? This is generally due to a chemical reaction caused by cooking in water which is too hot. When eggs are cooked in water held below the boiling temperature and cooled immediately in cold water, this greenish discoloration seldom occurs.

Eggs: plain and fancy. There are many ways in which the standard egg dishes can be “dressed up” for special occasions. For example, plain poached eggs topping a slice of grilled ham on a slice of toast and served with cheese sauce make a glamorous dish known as “Eggs

CLASS PROJECT: A SUPPER PLATE WITH OMELET OR SCRAMBLED EGGS.

Plan a well-balanced plate including eggs as the protein food, a vitamin C food, and a milk beverage.

1. Watch a demonstration of making an omelet and scrambling eggs. Study the recipes on pages 306 and 307 and the discussion in this unit.

2. Plan a plate which can be prepared quickly. It may include other cooked foods if they can be quickly done.

3. Make a working schedule which will have the supper ready "on the minute."

4. After the supper has been served, discuss good and poor points in your work.

Benedictine." Hard-cooked eggs can be used in dozens of ways to make attractive and tasty dishes: deviled eggs for picnics and lunch boxes; creamed eggs varied with green peas or cheese sauce; in salads combined with vegetables, meat, and mayonnaise; as garnishes for meat and vegetables platters.

Eggs as useful ingredients. Eggs may serve various purposes when combined with other ingredients.

1. Eggs are used as a means of thickening. Baked custards and soft custards are thickened entirely by their egg content. Other custards and puddings may be partially thickened by eggs.

2. Eggs add flavor and color to puddings and other foods. For example, cornstarch pudding may be thickened entirely by the cornstarch, but it is more attractive in color and flavor when eggs are added.

3. Eggs may be used as a binding agent. In some foods, eggs are used to hold the other ingredients together. Croquettes and some meat loaves are made firm by eggs.

4. Eggs are used as a stabilizer in emulsions. Oil and vinegar used in making mayonnaise would soon separate, as they do in French dressing, if it were not for eggs beaten into the mixture which makes the emulsion permanent.

5. Eggs can be used as a leavening agent. When egg whites are beaten until foamy and stiff, many tiny air bubbles are caught in the foam; and when the egg whites are folded into a mixture of sugar and flour, the resulting product is light and open in texture. Soufflé, waffles, sponge cake, and angel food cake are examples of this type of egg cookery.



Armour and Company

Can you find all seven basic food groups in this supper? The supper includes scrambled eggs, broccoli, buttered toast, salad, and a glass of milk.

Recipes for eggs

POACHED EGGS

- BOIL** water in a skillet or a low-sided saucepan; reduce heat to simmering.
- BREAK** egg into a saucer and slip individually into simmering water; when there is a film over top and white is firm, remove with a slotted spoon or cake turner and place on a slice of buttered toast, noodles, rice, or some vegetable such as spinach.
- DOT** with butter or fortified margarine and season with salt and pepper.
- NOTE:** An egg poacher may be used.

SOFT-COOKED EGGS

- BOIL** water in a saucepan; place egg on a tablespoon and lower into water; reduce heat to simmering temperature; simmer from 3 to 5 minutes, depending upon the taste of the individual.

SERVE whole in an egg cup, or remove from shell by cracking in the middle with a knife and scooping out the egg into a cup or sauce dish. Dot with butter or fortified margarine and season with salt and pepper.

HARD-COOKED EGGS

PLACE eggs in cold water and bring to simmering heat; turn eggs several times before simmering heat is established to keep yolks in the center of the egg if they are to be deviled or used as a garnish. Cook for 25 to 30 minutes.

REMOVE pan to sink; turn cold water on eggs and chill immediately. This treatment makes the shell easily removed and does not disturb the white.

DEVILED EGGS

6 hard-cooked eggs	$\frac{3}{4}$ t. vinegar
$1\frac{1}{2}$ T. melted butter or fortified margarine	$\frac{1}{4}$ t. Worcestershire sauce
3 t. mayonnaise	$\frac{1}{4}$ t. salt
	F. G. pepper

HARD-COOK 6 eggs as directed, and chill; remove shells and cut in half lengthwise.

SEPARATE yolks from whites, and place yolks in a bowl and whites on a large plate or on waxed paper.

MASH yolks with a fork; add $1\frac{1}{2}$ T. melted butter or margarine, $\frac{3}{4}$ t. vinegar, $\frac{1}{4}$ t. Worcestershire sauce, 3 t. mayonnaise, $\frac{1}{4}$ t. salt, and F. G. pepper. Blend well and refill egg whites. Garnish with a little paprika.

NOTES: For extra garnish use a leaf of parsley or half of a stuffed olive. If packing eggs for a picnic or school lunch, place two halves together and wrap in waxed paper.

For making a salad, place eggs on lettuce leaves, endive, or water cress. A small amount of mayonnaise may be placed on the greens and garnished with paprika.

SCRAMBLED EGGS

SERVES 4

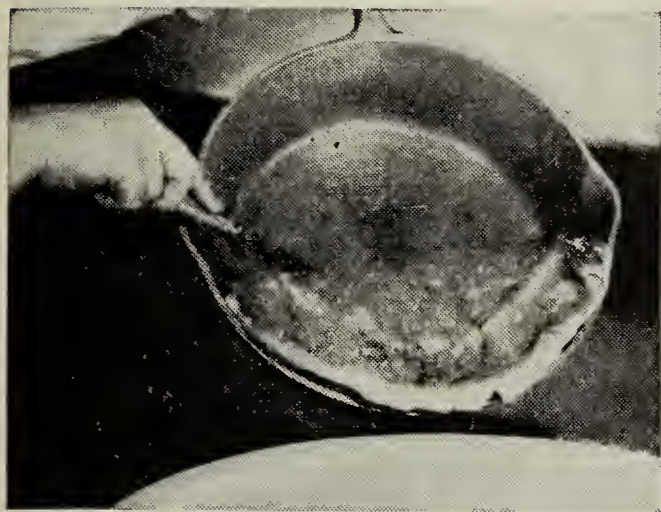
6 eggs, slightly beaten	F. G. pepper
$\frac{1}{2}$ t. salt	$\frac{1}{2}$ c. milk
2 T. butter or fortified margarine	

BEAT 6 eggs slightly; add $\frac{1}{2}$ t. salt, F. G. pepper, and $\frac{1}{2}$ c. milk; beat.

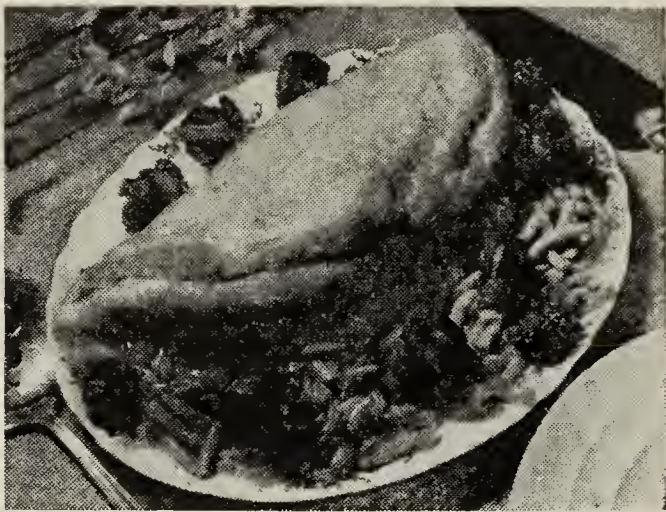
MELT 2 T. butter or margarine over a low heat in a skillet; pour in egg mixture and stir constantly until thick. Serve at once.

NOTE: Scrambled eggs may be cooked in the top of a double boiler over hot water.

PLAIN OMELET



Poultry and Egg National Board



Swift and Company

SERVES 4

- 6 eggs
- 6 T. milk
- 1 T. butter or fortified margarine
- $\frac{1}{2}$ t. salt
- F. G. pepper

- BEAT6 eggs, 6 T. milk, $\frac{1}{2}$ t. salt, and F. G. pepper together. Heat platter for serving omelet.
- MELT1 T. butter or margarine in a thin skillet. Pour eggs into skillet and cook over low heat, lifting the egg mixture at the edges with a spatula to let the uncooked portion run underneath, until the omelet is a creamy consistency.
- WHENomelet is a golden brown, roll one part over the other and turn onto a hot platter. Serve at once.
- NOTE:As variations for the plain omelet, place 3 T. grated or sliced cheese, chopped parsley, bacon, or tart jelly on top of the omelet before folding one part over the other.

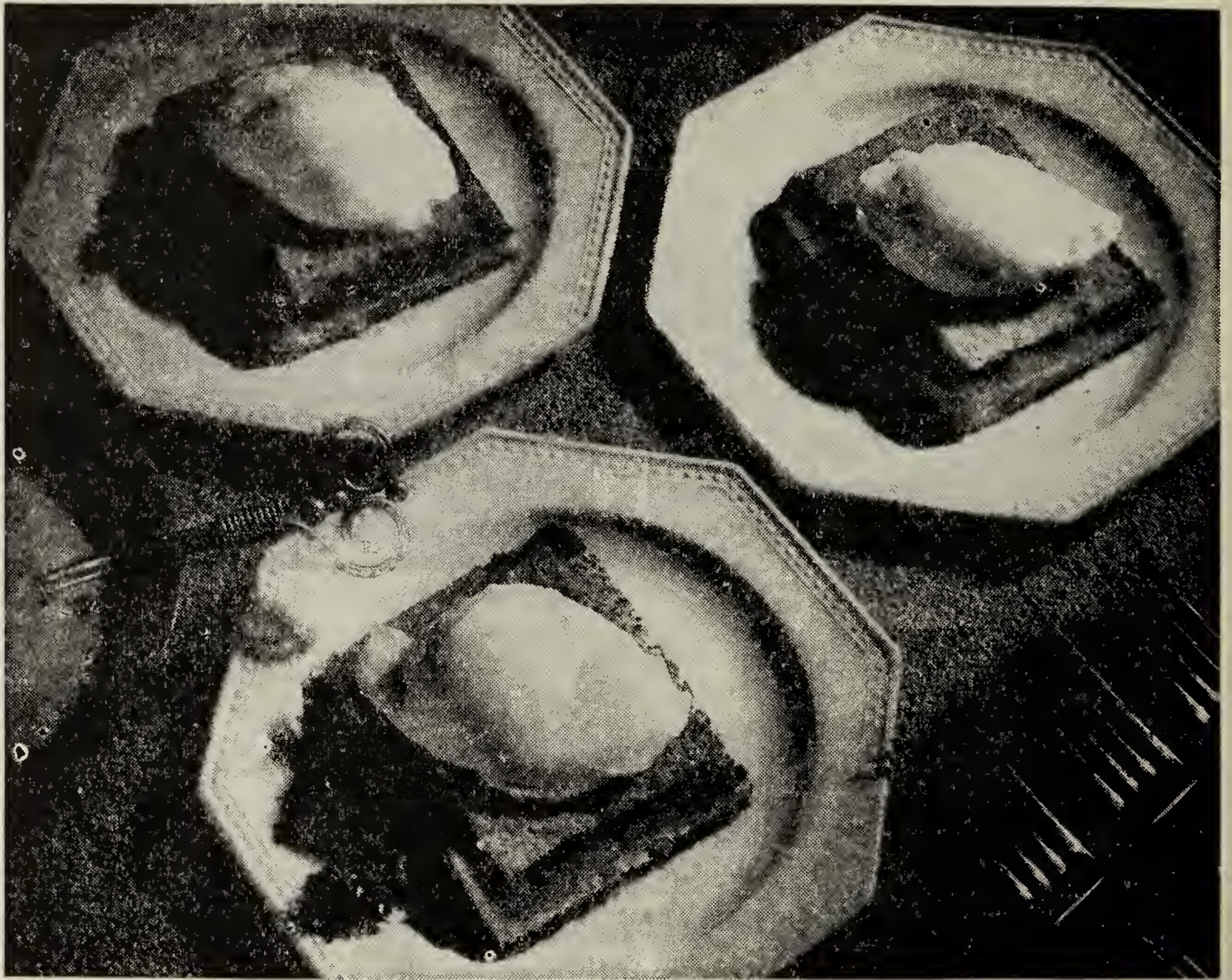
FRIED EGGS

- MELTover low heat in a skillet a small amount of bacon drippings, butter, or margarine.
- BREAKeggs in saucer and slide into skillet; cook until whites are firm. Season with a little salt; serve at once.

BAKED EGGS

- TURNoven to 300° F.; butter a shallow baking dish.
- BREAKeggs in a saucer and slide into baking dish; dot with butter or margarine; season with a little salt and pepper.
- BAKEin a very slow oven (300° F.) until eggs are set.

EGGS BENEDICTINE



Poultry and Egg National Board

SERVES 4

4 poached eggs (page 305)
4 thin slices of ham or bacon

2 c. cheese sauce (page 201)
2 toasted English muffins or buns

PREPARE 2 c. cheese sauce.

BOIL water for eggs. Pan-broil bacon or ham until edges are curly.

CUT muffins or buns in half; brown crust side first; turn; brown other side and butter.

POACH 4 eggs.

PLACE ham or bacon on buttered side of the muffin; then place egg on top; pour cheese sauce over all, and garnish with paprika.

EGGS À LA GOLDENROD

SERVES 4

5 hard-cooked eggs (page 306)
4 pieces of hot buttered toast

2 c. medium white sauce (page 74)

COOK 5 eggs as directed. Remove shells.

PREPARE 2 c. white sauce.

CUT eggs lengthwise in quarters; place one egg yolk aside for garnish and place the rest of the eggs in the white sauce; let stand over hot water without heat for 30 minutes.

MAKE buttered toast. Place on a platter or individual plates; cover with the creamed eggs and garnish by pressing egg yolk through a fine sieve. Serve at once.

SERVES 4

12 slices toasted bread	$\frac{1}{2}$ c. chopped celery
butter or fortified margarine	1 T. chopped parsley
4 hard-cooked eggs	$\frac{1}{2}$ T. chopped pimento
8 slices bacon, broiled	$\frac{1}{3}$ c. mayonnaise or salad dressing
2 medium tomatoes	$\frac{1}{4}$ t. salt
lettuce leaves and water cress, chilled	F. G. pepper
12 stuffed olives	

PREPARE the egg salad by chopping 4 hard-cooked eggs, $\frac{1}{2}$ c. celery, 1 T. parsley, and $\frac{1}{2}$ T. pimento.

ADD $\frac{1}{3}$ c. mayonnaise or salad dressing, $\frac{1}{4}$ t. salt, and F. G. pepper. Mix gently.

COMBINATION EGG SALAD SANDWICH



Poultry and Egg National Board

TOAST	12 slices bread and spread with butter or fortified margarine.
BROIL	8 pieces of bacon and drain on clean absorbent paper.
WASH	and cut tomatoes in 8 slices.
MAKE	sandwich by first placing egg salad on one piece of toast; top with the second piece of toast.
PLACE	2 slices of tomato, 2 strips of bacon, and a piece of lettuce on this slice of toast; top with the third slice. Insert 4 toothpicks to hold sandwich together.
CUT	sandwich in quarters. Arrange on plate; garnish with water cress and olives.

EGGS À LA KING

SERVES 4

5 hard-cooked eggs	1 c. sliced fresh mushrooms
1½ c. medium white sauce	¼ t. salt
1 T. chopped pimento	F. G. pepper
1 T. butter or fortified margarine	
COOK	5 eggs as directed for hard-cooked eggs (page 306).
PREPARE	1½ c. white sauce and let stand over hot water for 30 minutes.
WASH	and slice 1 c. mushrooms and cook in 1 t. water in a skillet until water is evaporated. Add ¼ t. salt, F. G. pepper, and 1 T. butter or margarine; sauté.
CHOP	1 T. pimento. Cut eggs lengthwise in quarters.
ADD	eggs, mushrooms, and pimento to white sauce and heat over hot water 10 minutes.
SERVE	on a slice of buttered toast or in a patty shell. Garnish with parsley and paprika.

CLASS ACTIVITIES

- Discuss the following questions:
 - Would you rather have eggs which are guaranteed for age or freshness? Why?
 - How do the rules for protein cookery and vegetable cookery differ?
 - How could vegetarians include complete proteins in their diet?
 - Could a diet of milk and eggs be considered completely well-balanced? Why or why not?
- Discuss the possibilities for buying fresh eggs in your community. How are the eggs handled in the stores where you buy them? Can government-graded eggs be purchased in your locality? Where? How does the price of graded eggs compare with other eggs?
- Check up on your own diet of protein foods. Do you eat a protein food every day in addition to milk? And a vegetable or cereal food with protein value? How many eggs per week do you eat?

4. What steps are alike in the preparation of scrambled eggs and omelets? What are the differences? Study the recipes on pages 306 and 307.

FUN WITH FOOD AT HOME

1. Make picnic "eats" from hard-cooked eggs. You might choose deviled eggs, egg-salad sandwiches, sliced-egg-and-meat sandwiches, or other ways of using hard-cooked eggs.

2. Serve your family with eggs prepared in a different way every day for a week. These dishes may include angel food cake, custards, salads, and main dishes.

3. Collect egg recipes for the Protein Section of your personal recipe book.

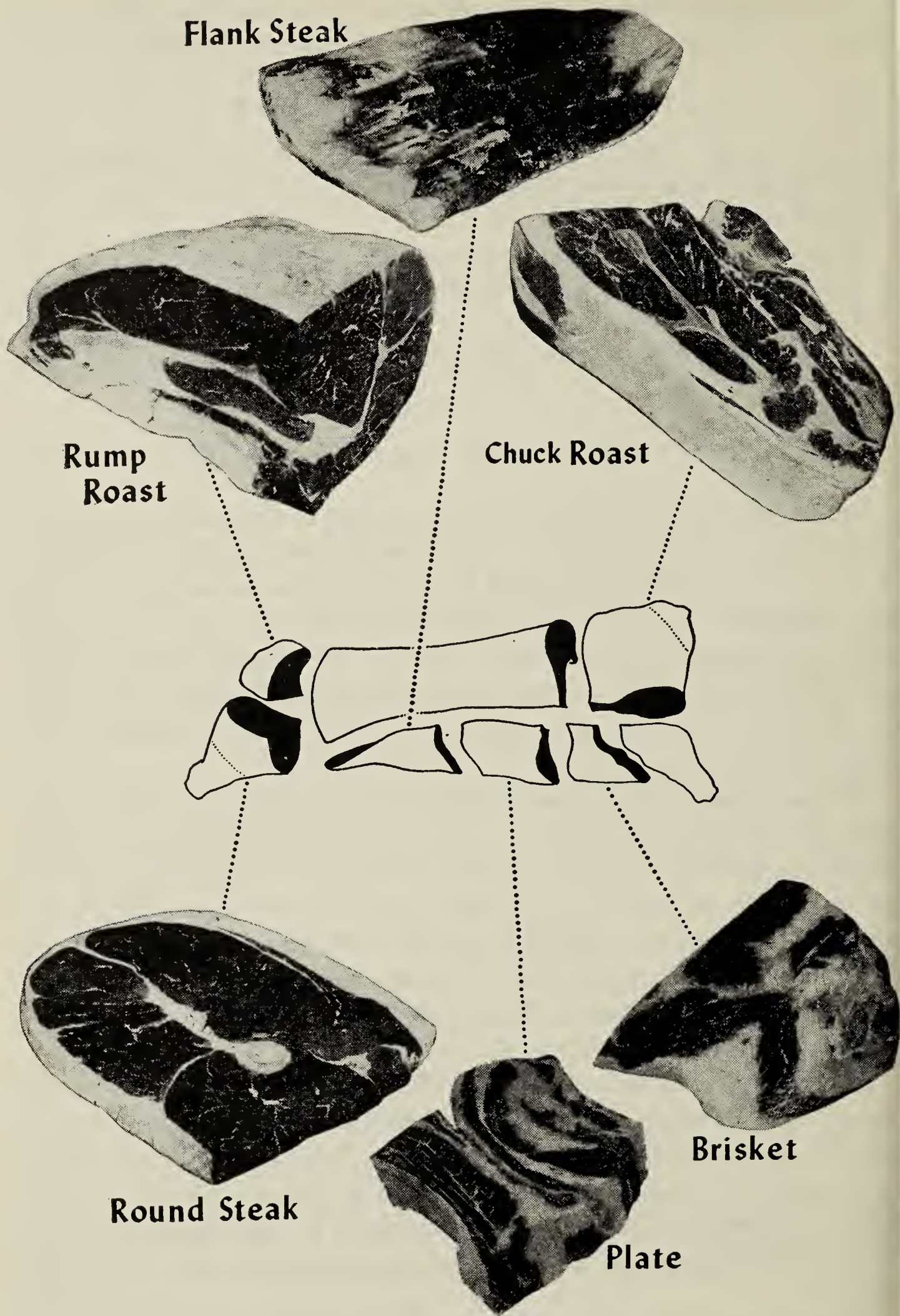
3. Tender ways with not-so-tender meat!

In general, there are two main classifications of the muscle meats: the tender and the less-tender cuts. There are also two methods of cooking meats: by dry heat and by moist heat. It is important to know which type of cookery to use for each type of cut, and it is equally important to know how to select cuts which will suit your budget and your appetite. In this problem we shall become acquainted with a few of the less-tender cuts that are easiest on the pocketbook and learn some ways to give them taste-appeal.

The less-tender cuts of beef. Muscle meats vary considerably in degree of tenderness, depending upon the age of the animal, the exercise which the muscles have had, and the amount of fat. Muscles are made up of bundles of fibers held together by connective tissue. When the animal is old and the muscles have been well exercised, the fibers are larger and the connective tissue is better developed. The result is a coarse-grained, tough meat. When the fiber is small and less connective tissue has been developed, the meat is tender.

Fattening the animal also has an effect upon the tenderness of the meat. Fat is deposited not only as an outer covering but also between the tiny fibers and in the fibers themselves. Some of it is large enough to be seen, and some of it is distributed in minute particles in the bundles of muscle fibers. This distribution of fat throughout the lean meat is called marbling. Well-marbled meat is more tender than other meat.

In every animal, the meat cut from certain parts is less tender than that from other parts. The muscles which receive the most exercise are less tender than those which are inactive. In a beef, the muscles of



Photos from the National Livestock and Meat Board

Six of the less-tender cuts which are best adapted to moist-heat cookery.

the shoulder, leg, neck, rump, and under part of the body receive the greatest use and yield the tougher cuts of meat. The diagrams and pictures on page 312 will help you to learn six of the less-tender cuts of beef. All these cuts are adapted to methods of moist-heat cookery: stewing, braising, and pot-roasting. Note the characteristic appearance of each cut: the round bone in the round steak, the long odd-shaped bone in the blade or chuck pot roast, the large, solid lean portion in the rump, the layers of fat in the plate, the lean layer in the brisket, and the long-fibered effect in the flank steak. Look for these cuts on your next visit to the butcher shop and observe their prices. A good way of beginning your study of meat cookery is to get acquainted with these cuts, their comparative costs, and the best way of preparing them for delicious meals.

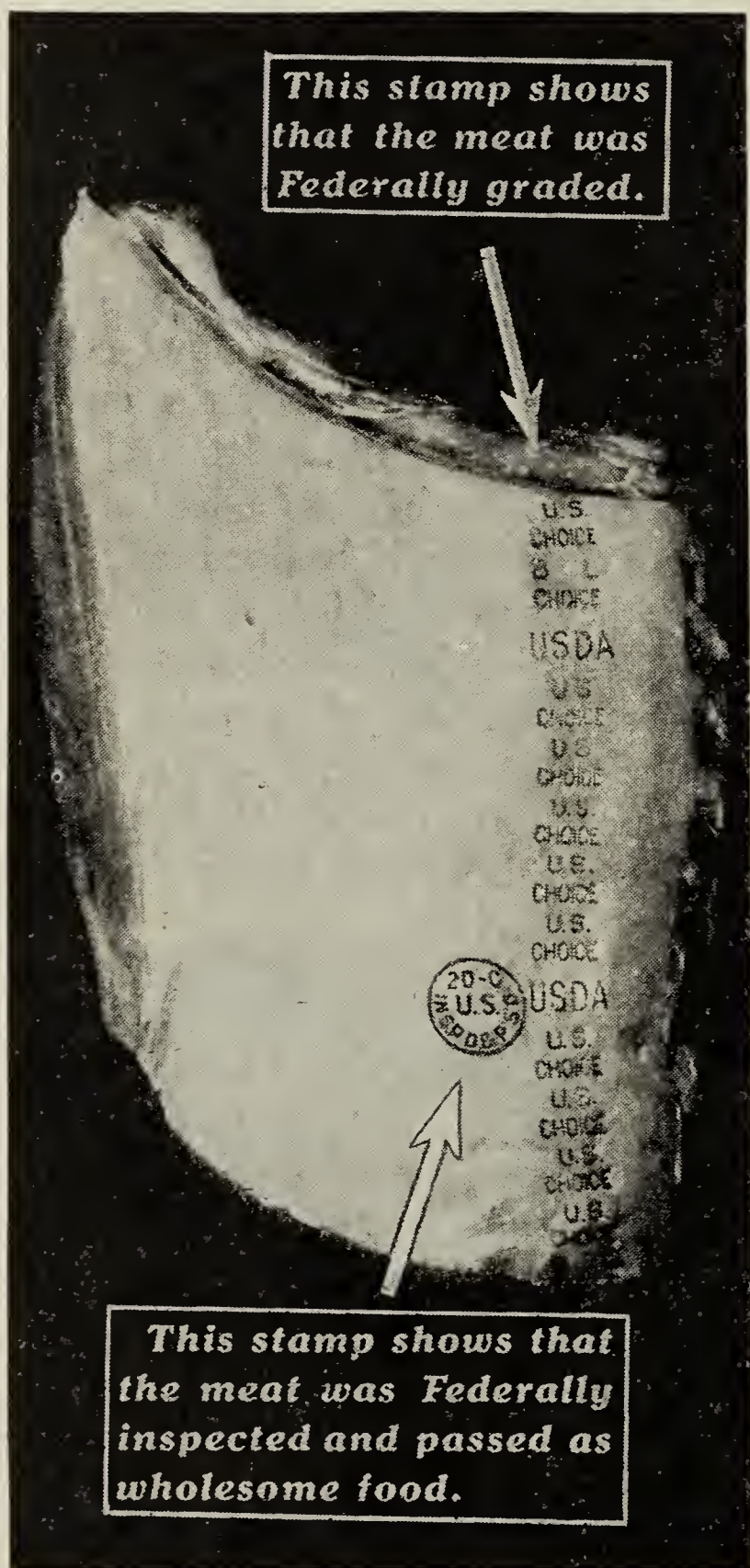
Veal cuts adapted to moist-heat cookery. Veal is more tender than beef because it is the flesh of a young animal—the calf. However, it contains little fat and much connective tissue and, therefore, requires long, slow cooking. With the exception of chops and steaks, veal can be cooked successfully by dry-heat methods. Because of the lack of fat, these cuts, if thoroughly cooked by dry heat, would be dried out. The long cooking required for softening the connective tissue is best done by moist-heat methods. Round steak, called cutlet, loin chops, and rib chops are best adapted to moist-heat cookery. Veal rump of good quality may be cooked successfully by dry heat or oven roasting.

Moist-heat cookery for lamb and pork cuts. Good-quality lamb and pork are tender meats, and most cuts can be cooked by the dry-heat method, which we will study in the next problem.

The shoulder, breast, and flank are the least tender of the lamb cuts and are generally cooked by the moist-heat methods, stewing and braising. Grinding less-tender meat is another method of tenderizing it. For example, lamb patties are made by grinding flank or shoulder and wrapping each patty with a strip of bacon. A rolled roast made from breast or shoulder of lamb is well suited for braising.

All pork should be thoroughly cooked. Although the meat is tender enough to cook by dry heat, chops and some slices of ham are best when braised, rather than broiled, because sufficient broiling to cook the meat thoroughly will also dry it out. This is a case where a tender cut is better when cooked with moist heat.

Special or variety cuts. Sundry meats include liver, heart, sweetbreads, brains, tongue, kidney, and oxtails (beef). These meats are economical, supply valuable nutrients, and add variety to the menu.



Some of them are tremendously rich in mineral and vitamin values. Liver, for example, is extraordinarily rich in iron, vitamin A, and the B complex.

Methods of cooking vary for the specialty cuts, but many of them are best adapted to long, slow cooking in moist heat. Calf and lamb liver may be broiled, but beef and pork liver are better braised. Tongue and heart should be braised or simmered.

Purchase government-inspected meat. No matter what cut you choose to buy, you will wish to have the meat clean, wholesome, and free from disease germs. The best guarantee for safe meat is government inspection. Federal, state, and city governments all carry on meat inspection services. Federal inspection is required by the Meat Inspection Act of 1906. This law requires that any meat sold in interstate commerce must be inspected and passed by a government inspector. The round purple stamp, which you may have noticed on meat, indicates that it has been approved by a special government inspector. See the accompanying

Food Distribution Administration

The best guarantee that meat is clean and free from disease is government inspection.

illustration. This inspection begins with the live animals. If any are found which are diseased, they are destroyed. The inspection also includes a check on sanitary conditions in the packing plant from the time the animal is killed until the meat is sold. The meat is examined for such disease germs as tuberculosis and cholera. Finally, a government inspector puts the stamp of approval on each carcass. Remember, that is the round stamp in purple ink, "U. S. Insp'd. & P'S'D," and do not confuse it with other stamps. The number appearing in each round stamp indicates the plant in which the meat was killed and dressed. Approximately two thirds of all the meat sold in the United States is inspected by a federal government inspector.

Most state and city governments carry on an inspection service for meats killed and sold within the state or city. Many of these inspections are as efficient as the federal inspection service. When one buys "home dressed" meats, it is reassuring to know that the meat is clean and safe. Government meat inspection is your guarantee of safety. Every consumer who buys meat should be sure that it has been passed by one of the government meat inspection services.

Guides to qualities in meat. Meat cut from the same part of different animals also varies greatly in eating quality. The round steak from one carcass may be very much more tender than the round steak from another carcass. In fact, the tenderest cut from one carcass may be tougher than the toughest cut from another. Although very apparent in the eating, such variations as these are not easily detected in the butcher shop. Obviously, the consumer needs help in selecting good-quality meat. A meat-grading service is maintained by the Agricultural Marketing Service of the U. S. Department of Agriculture. This agency will furnish expert meat graders to any meat packer who wishes to have them. The graders are paid by the packer, but the cost amounts to only a fraction of a cent per pound to the consumer.

Now for the grades. U. S. grade names are imprinted on the meat with a roller stamp which leaves a purple, ribbonlike mark the entire length of the carcass. Incidentally, the purple is a harmless vegetable dye which usually disappears during cooking. Most retail cuts should show at least a part of the grade stamp. See illustration on page 314.

Here are the grades for beef and what they mean:

U. S. Prime. This is the highest grade of beef obtainable. The quality is very limited and is used largely by exclusive hotels, restaurants, clubs, etc. Most consumers consider beef of this grade to be uneconomical because of the abundance of fat. The lean is very firm and velvety in

CLASS PROJECT: A DINNER PLATE WITH HAMBURGER PATTIES OR MEAT LOAF.

Plan a well-balanced dinner plate using ground beef, a green vegetable, and a hearty vegetable.

1. Watch a demonstration of preparing ground beef in patties or in meat loaf. Study the recipes on pages 322 and 323.

2. Your previous experience should make it possible for you to prepare the vegetables without a preliminary demonstration, but you may find it necessary to review the general directions and recipes.

3. Plan a work schedule which will allow proper time for cooking, serving, and a final discussion of the project.

4. Work efficiently, remember safety practices; and remember to keep your working areas orderly.

appearance; the fat is usually white and very firm and brittle, and the marbling (intermingling of fat within the lean) is very extensive and uniform.

U. S. Choice. This is the highest grade commonly found in retail shops. Meat labeled "Choice" is smooth and velvety in appearance. The lean is bright and may range from pale to deep red in color, with marbling which is readily apparent throughout the lean. The fat covering is moderately thick, white, or creamy white in color.

U. S. Good. The lean is moderately smooth and velvety, light to dark red, with some marbling. It usually has a slightly thinner covering of fat than "Choice," and the fat may show a yellowish tinge.

U. S. Commercial. The lean may be somewhat soft and watery or slightly coarse. The color of the lean may vary from light to dark red, but there is practically no marbling. The fat covering is usually thin and may be slightly yellow and soft. This grade gives good results when cooked in moist heat, as for a pot roast or stew.

U. S. Utility. The lean meat is light to very dark red and rarely shows any marbling. The very thin fat covering varies from grayish white to decidedly yellow. Much of the beef of this grade is produced from animals quite advanced in age. This grade is relatively low in price and, like the Commercial grade, should be used for dishes which require long, slow, moist cooking. Similar characteristics are exhibited by the various grades of veal, lamb, and mutton.

Appearance of good-quality meat. Although the homemaker can hardly hope to become as expert in the selection of good-quality meat



The Crisco Kitchen

A meat patty, French fried potatoes, and buttered asparagus make a good supper plate.

as the official government grader, yet there is much that she can learn about the appearance of meat which will help her to select the best cuts. This is especially helpful in buying meat at shops where government-graded meat is not sold.

The following characteristics¹ of good meat are easy to see after you have had a little experience in comparing qualities. Practice observing these qualities on each visit to the butcher shop.

How to tell fine-quality beef:

Lean: Light to medium red in color.
Fine even grain.
Firm.

Fat: Creamy white, firm, almost brittle.
A good outside layer of fat.
Extensive marbling of fat throughout lean.

¹ Armour and Company, Chicago, Illinois.

If beef has coarse texture, very dark color in lean, and very yellow fat, it is undoubtedly of poor quality.

How to tell fine-quality veal:

Lean: Pinkish grey color.
Fine in texture.
Less firm than beef.
Moist.

Fat: Pinkish white in color.
Small amount of fat.
Little marbling of fat through lean.

Bones: Pinkish color on cut surfaces of bone indicate young meat.

Poor-quality veal is very moist and limp, has a dull color and no fat.

How to tell fine-quality lamb:

Lean: A dull pinkish color.
Fine texture.
Firm.

Fat: Very hard.
Pinkish white.
Abundant on both outside and inside of cuts.

Bones: Pinkish.

The "break joint" in lamb is the surest test of young lamb. This is the joint at the lower part of the foreleg where the forefeet are removed. When broken, this joint leaves a ridged, pink, moist break. Older animals show a whiter, harder break.

How to tell fine-quality pork:

(For fresh pork, follow these guides to quality.)

Lean: Light pinkish white color.
Very fine texture.
Firm.

Fat: Medium soft.
Very white.
Abundant on outside of cut and throughout lean.

Bones: Pinkish on cut surface.

Poor quality in pork is recognized by a deep red color in lean, little fat, and a coarse, flabby texture.

Grinding tough meat for better eating quality. The well-known hamburger would not rate so high in popularity if it had not been put through the meat grinder. It is generally made from the tougher cuts such as flank, neck, and shank. Good hamburger is chiefly lean beef with enough fat for flavor and successful broiling. When it contains too much fat, the hamburger patties shrink in the frying pan as the fat cooks out, and the meat loaf is swimming in melted fat when taken from the oven. With experience, you will learn to judge the fat content of ground beef by its appearance. Hamburger with a high fat content is not a good buy.

The grinding process renders tough meat suitable for cooking by the same methods used for tender meats: broiling, roasting, and frying. Hamburger patties may be pan-broiled, oven-broiled, fried, or broiled over an open fire at a picnic. The same meat cooked by any of these processes before grinding would be very tough eating!

There are several pleasing variations for the simple hamburger patty. It may be cooked "as is" with only the addition of salt while in the frying pan. It may be cooked with or without onions. Some recipes call for eggs, milk, and dry bread crumbs to be mixed with the meat before it is formed into patties. This same mixture generally forms the basis of the meat loaf. The patty may be served crisp and brown in a bun, plain or barbecued, or on the dinner plate with or without gravy. Meat loaves may be made large for slicing or in small, individual sizes. There are endless possibilities for the lowly hamburger.

Moist-heat cookery for less-tender cuts. The principle of moist-heat cookery involves long, slow cooking in water at a simmering temperature. *Braising* is a general term which refers to the process which includes browning the meat in hot fat, adding a small amount of water, covering the pan tightly, and simmering until done. The cooking is done at simmering temperature (about 185° F.) in order to avoid toughening the meat fibers. Braising is a process which cannot be hurried with successful results.

This process is generally used for the less-tender cuts which are left in one large piece while cooking. Pot roast, Swiss steak, breaded veal cutlets, or breaded pork chops are braised meats. Often, the cooking may be done in the oven. The cook should be careful to keep the pan covered tightly during the cooking period to prevent the escape of the steam which helps to cook the meat. The cover should not be removed, except occasionally to see if additional water is needed. A tight fitting cover is advantageous.

CLASS PROJECT: A DINNER PLATE WITH POT ROAST OR STEW.

Plan a dinner plate which will include either pot roast or stew and at least three vegetables cooked with the meat.

1. Since meat is expensive, it may be that your food laboratory budget cannot afford to have each group prepare stew or pot roast. In this case, let one group be appointed to assist the teacher in a demonstration lesson. The demonstration should include the making of gravy from the pot liquor and meat drippings. Other groups should have their turns at assisting in the demonstration lessons on roasts, fish, and poultry.

2. The whole class should participate in planning the project, the selection of meat and vegetables, the steps in preparation, and serving.

3. Study the recipes and the pictures on pages 321 and 325. Note the steps which are the same in the preparation of pot roast and stew and those which are different.

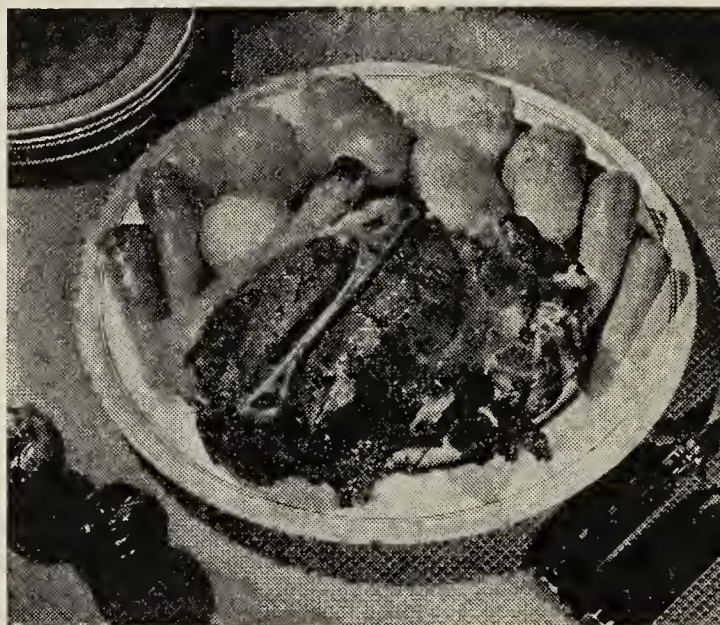
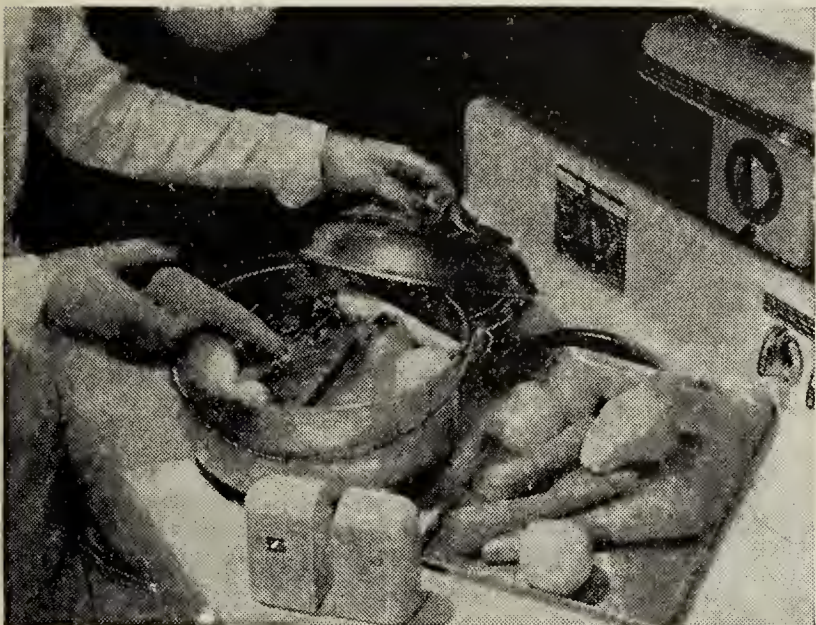
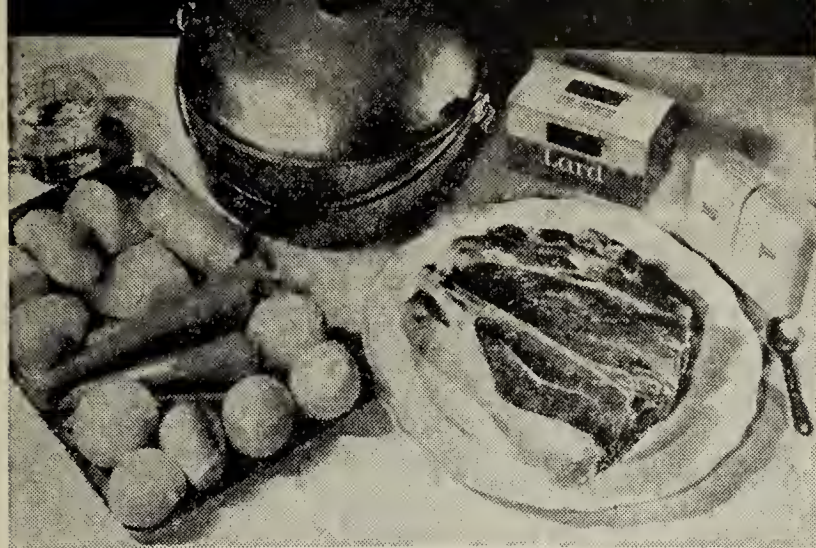
4. If possible, the class should have a share in the selection and purchase of the meat. Remember to examine it for marbling with fat, color, government-inspection stamps, and for grading stamps.

5. Eat the stew or pot roast with a critical eye and tongue. Judge it according to the standards on page 322. If it is not perfect, how could it be improved?

SAFETY WARNING: Remember to keep pot handles turned in!

Stewing, or simmering, does not differ greatly from braising. In this case, the meat is first cut into small pieces and enough water is added barely to cover it. For brown stew, the meat is first browned or seared in hot fat, and for light stew the meat is cooked without browning. The water should never be boiled but should be kept at simmering temperature.

The water or other liquid in which braised meat or stew has been simmered is generally thickened to make gravy. In cooking by moist heat, a certain amount of flavor and nutrients are lost by drippings into the water. By using the liquid to make gravy, flavor and nutrients are saved. Gravy can be made by any of the methods for making white sauce. The liquid will contain some fat which has melted out of the meat. If too much fat is present, it should be removed and saved for other purposes. Greasy gravy which separates or curdles is neither appetizing nor healthful. The proportions of fat and flour to liquid should be the same as those for making medium white sauce. In this case, the fat and some of the liquid are supplied by the simmering water in which the meat was cooked. If the liquid has cooked away, it may be



Armour and Company

HOW TO MAKE A POT ROAST

Top left: (Step 1) Pot roasts generally weigh 3 to 5 lbs. Try beef blade or round bone chuck roasts, heel of round, rolled rump, or rolled rib roasts from lower grade beef or veal rump or rolled shoulder. A heavy kettle with tightly fitting lid is necessary equipment. The meat illustrated is blade bone beef chuck roast.

Top right: (Step 2) Thoroughly brown meat in 2 T. lard in heated kettle for about 25 to 30 minutes. Then add small amount of liquid, $\frac{1}{4}$ to $\frac{1}{2}$ c., and seasonings. Cover and let simmer over lowest heat for $3\frac{1}{2}$ to 4 hours. Variations in flavor are possible through different liquids and seasonings.

Bottom left: (Step 3) One hour before meat is done, add vegetables. Carrots, potatoes, and onions are fine with beef pot roast. Season the vegetables when they are added.

Bottom right: (Step 4) Make gravy from drippings in pan. Lift out meat and vegetables, blend in flour, and add liquid. Stir and cook until thickened.

desirable to add water so as to make the required amount of gravy. A flour-and-water paste may be added to the liquid for thickening, or the thickening mixture may be made by shaking flour and water in a jar. See Method 3 for white sauce on page 74. If the cook prefers, fat may be removed from the liquid and put into another pan. Then the flour is stirred into it, and the liquid is added. This method is not often used by experienced cooks because it is simpler to make the gravy in

the saucepan in which the meat was cooked. In this way, all the meat drippings are easily stirred into the gravy.

Standards for good braised meats and stews. Stews and braised meats should be judged by the following points:

1. Is the meat tender? Insufficient cooking or high temperatures will leave the meat too tough for good eating quality.

2. Are the vegetables well cooked? They should be completely cooked but not so soft that they are mushy.

3. Is the flavor well blended? When meat and vegetables are cooked together, the meat flavor should penetrate the vegetables.

4. Is the consistency of the stew good? Stews should not spread all over the plate, nor have a watery juice. On the other hand, stews should not be disagreeably thick.

5. Is the gravy from the pot roast smooth, good in color, pleasing in flavor, and no surplus fat?

Recipes for ground meat

BEEF MEAT LOAF

MAKES 10-12 SLICES

1½ lbs. ground chuck beef	1 egg
1 c. soft, coarse bread crumbs	1 small onion, diced finely, if desired
1 c. milk	⅛ t. pepper
1¼ t. salt	

CRUMB 1 c. bread coarsely in bowl; add 1½ lbs. ground meat, 1¼ t. salt, ⅛ t. pepper, and 1 small onion.

TURN oven to 325° F.

BEAT egg; add 1 c. milk; mix and add to meat mixture and combine all ingredients.

SHAPE into a loaf about four inches wide and eight inches long; place in a greased shallow baking pan, and bake in a slow oven (325° F.) for 1 hour. Or shape into individual loaves and serve as shown on page 431.

SERVE hot with gravy or tomato sauce (page 338). Beef meat loaf is delicious served cold and is good for sandwiches.

HAMBURGERS

SERVES 4

1 lb. ground chuck beef	¾ T. bacon drippings, if cooked on
½ t. salt	top of the stove
⅛ t. pepper	

MIX $\frac{1}{2}$ t. salt and $\frac{1}{8}$ t. pepper with 1 lb. ground beef, and make into four round balls.

PLACE $\frac{3}{4}$ T. bacon drippings in skillet and heat; brown hamburgers on both sides. The length of time depends upon whether the meat is to be well done or slightly rare. Hamburgers may also be broiled under the broiler. Serve on a warm platter and garnish with parsley.

NOTES: To serve with hamburgers, succotash (page 81) and tossed salad (page 280) are suggested.

A good extender for hamburgers is the addition of 1 c. bread crumbs and additional seasoning. Barbecue sauce (page 329), is delicious served with hamburgers for the outdoor supper or picnic.

Recipes for meat cookery with moist heat

BEEF PINWHEELS

SERVES 4

1 flank, round, or shoulder steak	$\frac{1}{2}$ c. finely chopped onion
1 T. bacon drippings	1 t. salt
$\frac{1}{2}$ c. chopped celery	1 marrow bone
$1\frac{1}{2}$ c. ground carrots	2 c. water
2 c. creamed green peas	

COOK marrow bone in 2 c. water at simmering temperature for $1\frac{1}{2}$ hours.

SCORE the steak and spread $\frac{1}{2}$ c. chopped celery, $1\frac{1}{2}$ c. ground carrots, $\frac{1}{2}$ c. chopped onion, and 1 t. salt on the unscored side. Roll, starting at the widest edge, and tie with string or fasten with skewers.

BROWN in 1 T. bacon drippings in a deep kettle; add $1\frac{1}{2}$ c. marrow bone water; cover and simmer for 2 hours. Remove meat and thicken broth for gravy.

SLICE in 1-inch-thick pinwheels and arrange on a platter with 2 c. creamed peas.

NOTE: Peas, mashed potatoes and sliced orange-and-grapefruit salad are good to serve with beef pinwheels.

SWISS STEAK

SERVES 4

$1\frac{1}{2}$ lbs. round steak, cut $2\frac{1}{2}$ inches thick	$\frac{3}{4}$ t. salt
	$\frac{1}{8}$ t. pepper
$1\frac{1}{2}$ T. melted suet or bacon drippings	marrow bone and 2 c. water for $1\frac{1}{4}$ c. stock, or $1\frac{1}{4}$ c. tomato juice
$\frac{1}{4}$ c. flour	

- WASH bone; add 2 c. water; bring to a boil and simmer for 1½ hours to make stock.
- MIX ¼ c. flour, ¾ t. salt, and ⅛ t. pepper together, and pound into the meat with the edge of a butcher knife. Cut meat in four serving pieces.
- HEAT suet or 1½ T. bacon drippings in skillet, and sear meat in hot fat on both sides. Pour on 1¼ c. stock or 1¼ c. tomato juice. Cover tightly.
- BAKE in a very slow oven (300° F.) for 1½ hours. Cooking may be done on top of the range over low heat.
- NOTE: Mashed potatoes (page 70) and buttered beets (page 82) may be served with Swiss steak.

BREADED CHOPS



Cereal Institute, Inc.

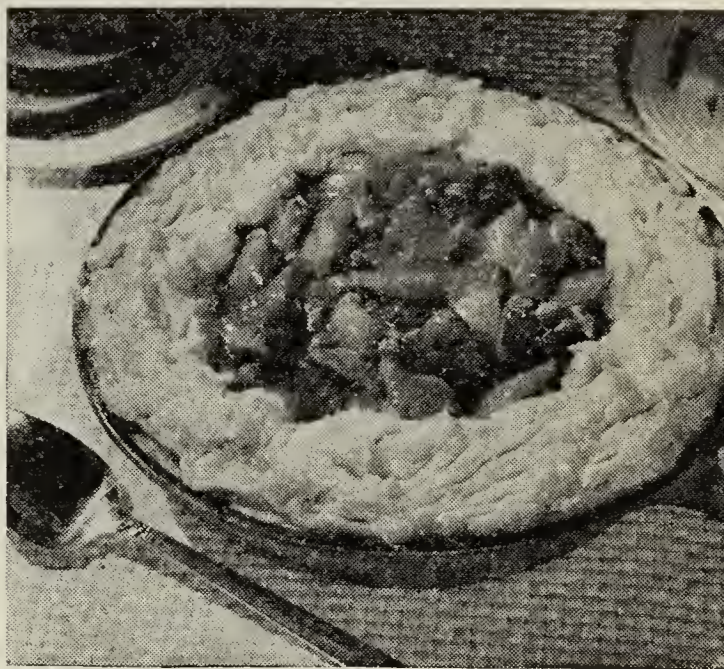
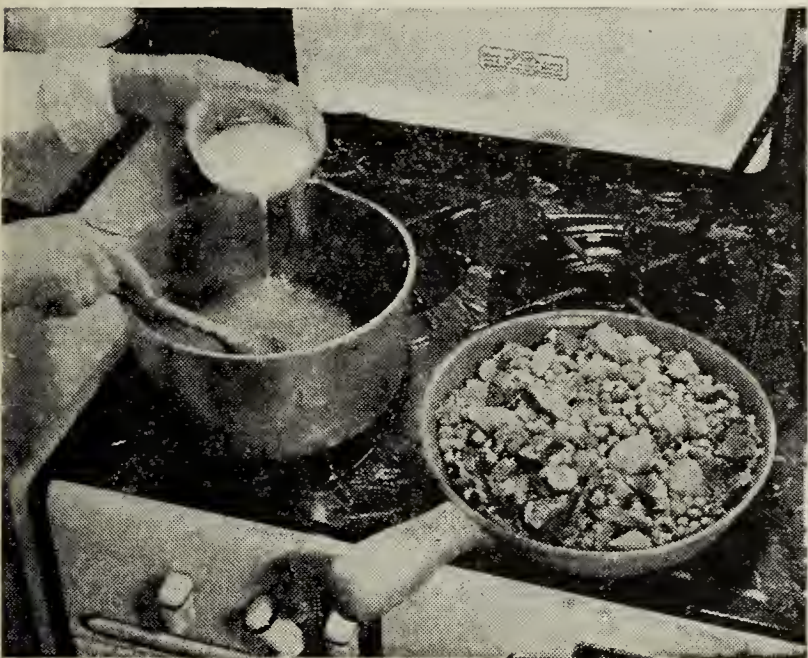
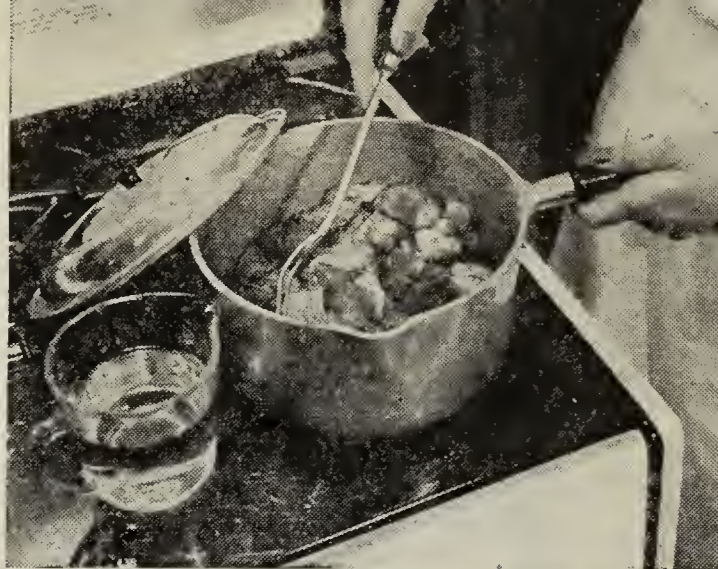


Armour and Company

SERVES 4

- | | |
|---------------------------------------|-----------------------------------|
| 4 veal or pork chops | ¼ c. milk |
| ¾ c. dried bread or corn flake crumbs | 3½ T. bacon drippings |
| ¾ t. salt | 1¾ c. boiling water |
| ⅛ t. pepper | 2 T. finely chopped onion |
| 1 egg, beaten | 1 T. finely chopped celery leaves |

- BEAT egg and add ¼ c. milk. Mix ¾ c. crumbs with ¾ t. salt and ⅛ t. pepper. Chop 2 T. onions and 1 T. celery leaves.
- HEAT 3½ T. bacon drippings in a heavy skillet.
- DIP each chop in egg mixture and then in crumbs. Place in hot fat and brown on both sides. Add 1¾ c. boiling water, onions, and celery; cover tightly.
- SIMMER gently for 1 hour; add a little more water if necessary.
- ARRANGE chops and small amount of remaining liquid on platter, and garnish with buttered green beans.



Armour and Company

THIS IS THE WAY TO MAKE A STEW

Top left: (Step 1) For stew, buy beef chuck, plate, flank, neck, or shank; lamb breast, neck, or shoulder; veal breast, neck, or shoulder. Assemble all ingredients: stew meat, vegetables, flour, salt, pepper, water, and a deep, heavy kettle with a tightly fitting lid.

Top right: (Step 2) For a brown stew, brown the meat thoroughly on all sides in a little fat in the kettle. Add water and seasonings, cover tightly, and let simmer (low heat) for about 1½ hours for veal or lamb, 2 to 2½ hours for beef. Add vegetables and let cook until tender. For light stew, meat is added to water without browning.

Bottom left: (Step 3) Remove vegetables and meat when tender and place in serving dish. Make a paste of flour and water and add to liquid broth. Stir and heat until thickened.

Bottom right: (Step 4) Pour gravy over the meat and vegetables. Serve plain or place in casserole and surround with frill of mashed potatoes. Heat in over or under broiling unit until potato peaks brown.

BRAISED STUFFED HEART

SERVES 4-6

1 beef heart, 2½ to 3 lbs.	¼ c. chopped celery
1¾ c. bread crumbs	1 egg, well beaten
1 t. salt	⅔ c. milk
⅓ t. poultry seasoning	½ c. water
1 t. chopped onion	

REMOVE veins and arteries of heart; wash inside well; drain, and sprinkle inside with ½ t. salt.

TURN oven to 350° F.

BEAT egg; add ⅔ c. milk, 1¾ c. bread crumbs, ½ t. salt, ⅓ t. poultry seasoning, ¼ c. celery, and 1 t. onion. Mix and stuff heart. Place skewers through the opening and lace with clean cord.

ARRANGE in covered baking pan or dish; add ½ c. water and bake in a moderate oven (350° F.) for 3 to 3½ hours, or until tender. More water may have to be added from time to time in order to keep adequate volume of steam.

PREPARE a gravy, adding 1 T. flour mixed with ¼ c. water to liquid in baking dish.

PLACE on a platter and garnish with parsley.

NOTE: Braised stuffed heart, scalloped potatoes (page 76), relish plate of uncooked vegetables, and fresh pear turn-over (page 257) are suggested for dinner.

BOILED TONGUE

1 smoked beef or veal tongue

SCRUB tongue well and place in a kettle and cover with cold water; heat to boiling, reduce heat, and simmer 3 to 5 hours or until tender.

TEST for doneness. (When small bones at base of tongue can be removed easily.)

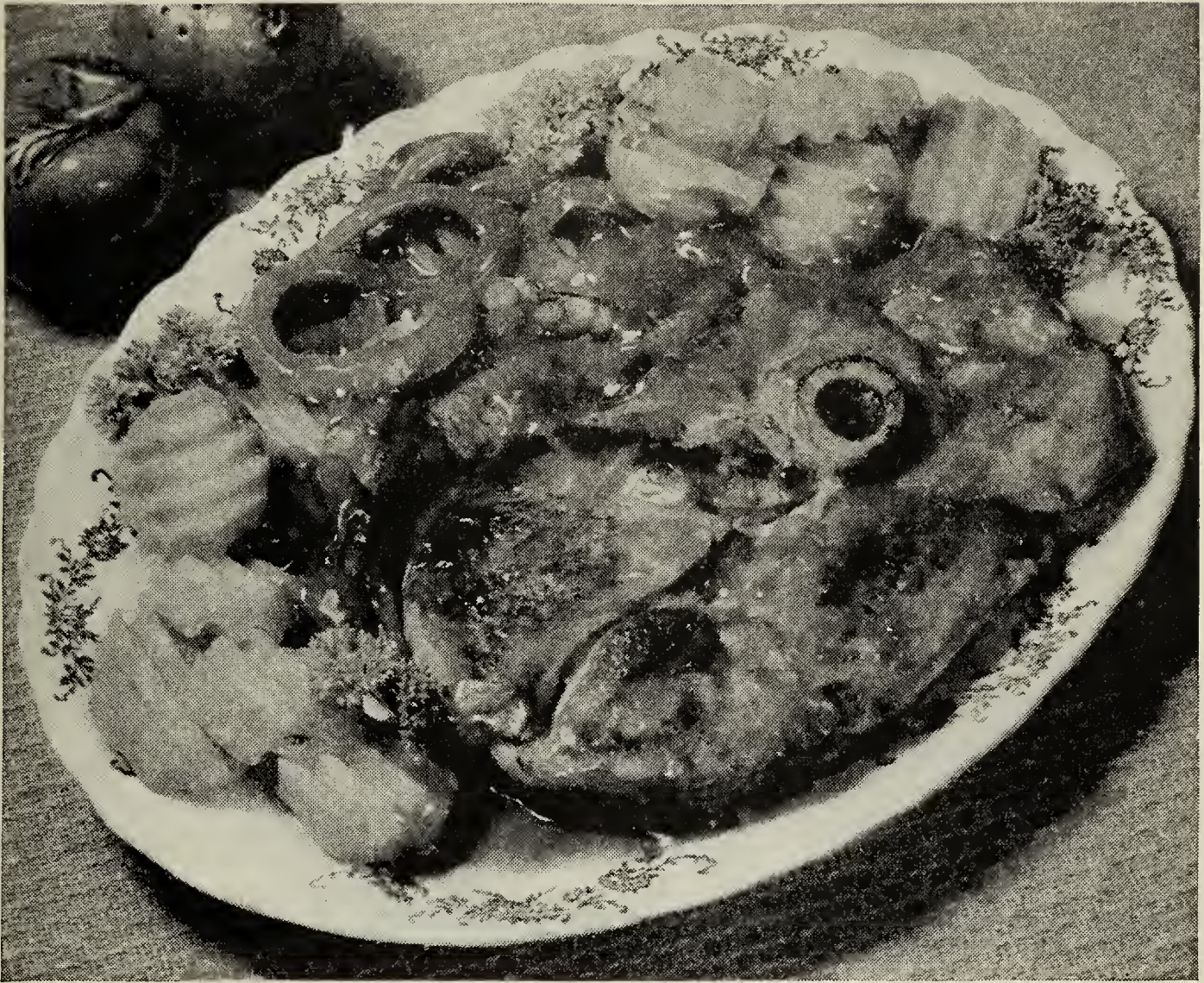
PLACE in cold water; remove skin, bones, and glands at the base of the tongue.

RETURN tongue to cooking water and reheat if to be served hot, or wrap in waxed paper when cool and place in the refrigerator.

NOTE: Cold sliced tongue and potato salad (page 78) are good for a buffet or picnic plate.

Tongue and rye bread sandwiches are a favorite with many people.

SWISS VEAL STEAK



Swift and Company

SERVES 4

1 lb. leg steak, 1-inch thick
3 T. flour
 $\frac{1}{2}$ t. salt
1 c. sliced onions

$\frac{1}{8}$ t. pepper
2 T. bacon drippings
1 c. tomato juice

- MIX 3 T. flour, $\frac{1}{2}$ t. salt, and $\frac{1}{8}$ t. pepper together and pound into the steak.
- TURN oven to 325° F.
- HEAT 2 T. bacon drippings in heavy skillet and brown steak on both sides. Add 1 c. tomato juice and 1 c. onions; bake in a moderate oven (325° F.) for 2 hours.
- ARRANGE meat on a warm platter, and pour tomato sauce over it. Garnish with buttered carrots (page 280) and parsley.
- NOTE: Swiss veal steak, buttered carrots, molded fruit salad (page 55), and ice cream are suggested for a menu.

BRAISED LAMB OR MUTTON CHOPS



Martha Logan, Swift and Company

SERVES 4

- | | |
|--|------------------------------------|
| 4 shoulder lamb or mutton chops | 3 T. butter or fortified margarine |
| 2 c. cooked rice (page 147) | 2 c. cooked tomatoes |
| 2 c. celery, cut in 1-inch pieces | $\frac{1}{2}$ t. salt |
| 1 T. finely chopped onion | 1 T. Worcestershire sauce |
| $\frac{1}{2}$ c. green pepper, cut into strips | |

MELT 3 T. butter or fortified margarine in skillet; add 1 T. onion, 2 c. celery, and $\frac{1}{2}$ c. green pepper; brown slightly. Remove from skillet and add 2 c. tomatoes, $\frac{1}{2}$ t. salt, and 1 T. Worcestershire sauce.

BROWN 4 chops on both sides in skillet and cover with vegetable sauce. Cook covered over low heat for 30 minutes.

COOK rice as directed for boiled rice.

ARRANGE chops, rice, and sauce on a warm platter, and garnish with parsley.

BOILED FRANKFURTERS

SERVES 4

- | | |
|----------------|---------------------|
| 8 frankfurters | 1 qt. boiling water |
|----------------|---------------------|

DROP frankfurters in rapidly boiling water; reduce heat and simmer for 20 minutes. Drain and serve with barbecue sauce. (Recipe below.)

BARBECUE SAUCE

12 medium-sized tomatoes, peeled and quartered	2 c. sugar
2 medium-sized onions, diced	2 c. vinegar
4 red sweet peppers, cut fine	2 T. salt

PLACE in a good-sized kettle, 12 tomatoes, 2 onions, 2 c. sugar, 2 T. salt, and 2 c. vinegar.

COOK 1½ hours or until the mixture ceases to look watery. Add 4 sweet peppers and cook for ½ hour.

PLACE in sterilized half-pint or pint jars and process in a hot-water bath for 15 minutes.

NOTE: Use for hamburgers or cold meats.

BOUILLON OR BROWN SOUP STOCK

SERVES 6-8

3 lbs. shin beef	¼ c. celery leaves, chopped
1 lb. marrow bone	1 t. parsley, chopped
8 c. cold water	⅓ c. each of diced turnips, onion, celery, and carrots
2¼ t. salt	1 T. bacon drippings
3 pepper corns	
1 egg white and shell	

CUT 3 lbs. meat in 1-inch cubes; put bones and two-thirds of the meat in a kettle and add 8 c. cold water.

BROWN remaining meat in 1 T. bacon drippings and add to the bones and meat. Let stand for 30 minutes. Heat to boiling and simmer for 3½ hours.

ADD ⅓ c. each of turnips, onions, celery, and carrots, 2¼ t. salt, and 3 pepper corns; cook for 45 minutes. Cool.

SKIM off fat and strain; add beaten egg white and shell and boil for 2 minutes. Cool.

STRAIN through a strainer lined with a double thickness of cheesecloth. Taste; add more seasoning if necessary. Pour into a glass jar, cover, and chill in the refrigerator.

SERVE cold with a slice of lemon, or reheat and serve hot.

NOTE: White soup stock is made as brown soup stock, using veal instead of beef. Do not brown the meat but cook with bones.

CONSOMMÉ

Use bouillon or brown soup stock recipe and directions with the exception of the meat and bone. Use half veal and half beef knuckle or half veal and half chicken. It may be served cold or hot, clear or with a few diced vegetables (celery, carrots) or with rice.

CLASS ACTIVITIES

1. Make a survey of the current prices for the less-tender cuts in your neighborhood stores. Which cuts give the best value for your money?
2. If possible, secure several pictures of common meat cuts. The pictures should not be labeled. Give each picture a number. Try to identify each cut.
3. What graded meats are available in your community stores? Observe the meat in the butcher's cases for identifying quality marks. How many government-graded meats do you find? Packer grades?
4. Discuss variations in the methods of preparing ground meat dishes.
5. Old cookbooks generally include recipes for "Boiled Beef." What do you think of this name?
6. Ask your mother's help in estimating the weekly expenditure for meat for your family. Could this amount be cut by using more of the less expensive cuts?

FUN WITH FOOD AT HOME

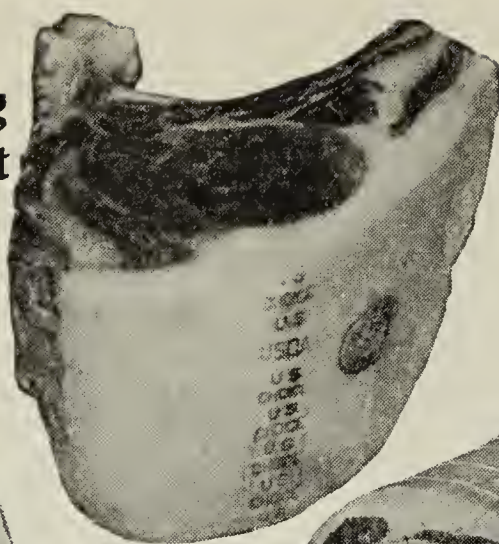
1. Plan a picnic or beach party with supper deluxe hamburger bun sandwiches for refreshments. The patties can be grilled over the open fire. Provide relish, barbecue sauce, horse radish, thin onion slices, mustard, and lettuce so that each person can make a sandwich to his or her liking.
2. Have a spaghetti dinner with meat balls and tomato sauce.
3. Serve your family with a less-tender cut of meat prepared in a new way.
4. Add a basic recipe for braising meat to the protein division of your personal cookbook. Also add at least three variations for braised meats, such as pot roast with vegetables and gravy, breaded pork chops, and Swiss steak.

4. Treat the tender cuts right!

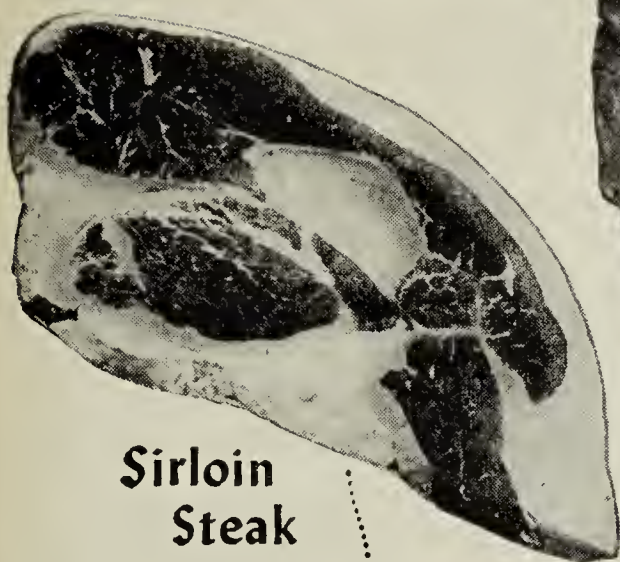
The tender cuts of meat are most satisfactorily cooked by dry heat, which includes roasting or baking, broiling, and pan-frying. Since there is less connective tissue in these cuts, long, slow cooking with moist heat is not required.

In this problem we will learn how to use dry-heat methods of cookery for the tender cuts of beef, veal, lamb, and pork which are adapted to this treatment.

**Standing
Rib Roast**



**Sirloin
Steak**



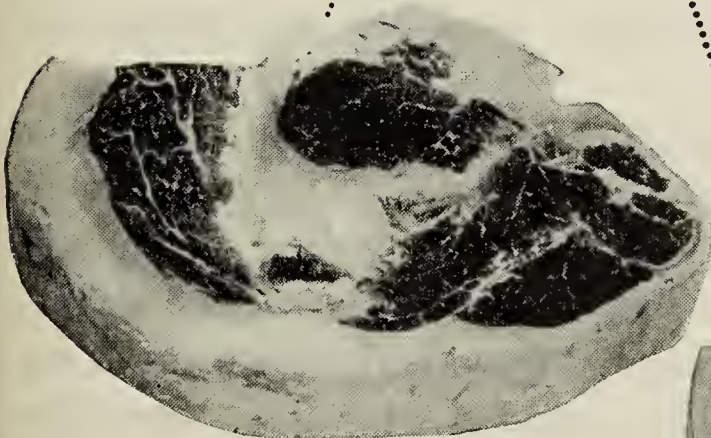
**Rolled
Rib Roast**



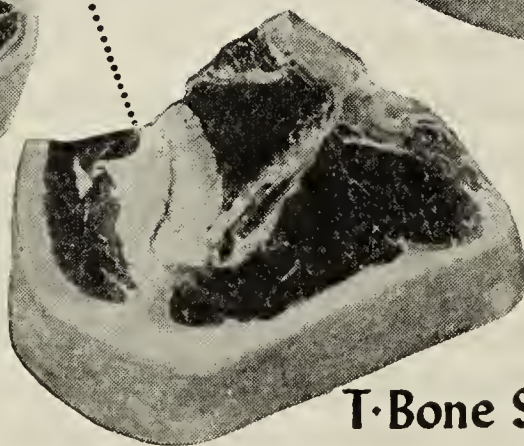
Club Steak



Porterhouse Steak



T-Bone Steak



Photos from the National Livestock and Meat Board

Six of the tender beef cuts adapted to dry-heat cookery.

CLASS PROJECT: A DINNER WITH BROILED CHOPS OR STEAK.

Plan a dinner with steak or chops, mashed potatoes, raw vegetable salad, a quick bread, and a beverage.

1. If the laboratory food budget does not permit expenditures for chops and steaks for each group, select one group which will assist the teacher in the preparation of the meat. Other groups can be responsible for the French fries, salad, bread, and beverage, all of which have been practiced in previous lessons.

2. Plan a work schedule which will have all the foods ready for serving at the same time.

3. If possible, enough food should be prepared so that each member of the class may have a small portion. If steak is served, the teacher will demonstrate the correct method of carving it.

4. For correct serving, this dinner requires three plates, one for the meat and potatoes, one for the salad, and one for the bread. Even with the small portions, the salad should be served on a separate plate to keep it cold and crisp.

5. After the dinner has been eaten, hold a discussion concerning its success. Was the food well cooked? Was the combination of flavors good? Were food values well balanced? Was the service correct? Were the eating manners nice?

Tender cuts of beef. Since the muscles of the back receive the least exercise, less connective tissue is formed, and, therefore, cuts from the back and loin are most tender. Study of the diagram on page 331 shows that rib roasts and rib steaks are cut from the part of the carcass next to the shoulder. Farther back, club steaks, T-bone steaks, and porterhouse steaks are cut from the part called the short loin. Still farther back are the sirloin steaks.

The photographs on page 331 show the characteristic appearance of club, T-bone, porterhouse and sirloin steaks. Notice the thick layer of fat around the outside and the strongly marked marbling throughout the steaks, indicating good quality. Compare the shapes of the steaks; the club steak is longer and narrower than the others, and you can see by studying the shape of the carcass on page 331 why this is true. The T-bone is named for the shape of the bone and has meat on both sides of the T. It also has a tail, but since this part is not always tender, some people prefer to have it ground and cook it as a patty.

The sirloin steak is also well marbled and is surrounded by a thick layer of fat. Observe the characteristic shape of the sirloin bone. A comparison of the sirloin steak with the round steak shown on page 312 will help you to remember each of them.



Swift and Company

Steak, mushrooms, stuffed green peppers, and mashed potatoes make a beautiful dinner platter.

A standing rib roast and a rolled rib roast are shown on page 331. Good-quality beef is again indicated by the thick outside layer of fat and by the marbling. The government grade "Choice" shows in the continuous ribbon stamp. The round government-inspection stamp is also clearly shown. Some people prefer a rib roast rolled because of the ease in carving. Others believe that if the roast is cooked with the bone, a better flavor is obtained. The bones should always be used, however, for soup or gravy.

Cuts from veal, lamb, and pork adapted to dry-heat cookery. Nearly all cuts of these meats are tender, and with the exception of those which would be dried out by dry-heat cooking, are most satisfactorily prepared by roasting or broiling.

Veal from the breast, ribs, loin, rump, and leg can be roasted, and all cuts of lamb, with the exception of neck and shanks, are adapted to cooking with dry heat.

All pork cuts are tender, and with the exception of the chops and steaks, are best cooked by roasting. Fresh pork is never broiled because it could not be thoroughly cooked through without destroying palata-

bility. However, slices of cured pork or ham can be broiled successfully.

Broiling, pan-broiling, and pan-frying. When you plan to have broiled steak or chops for dinner, you must have meat which is suitable for this kind of cookery. This is where grading for quality is very important to the consumer. The so-called tender cuts from some animals are not tender enough to broil. Before you broil, be sure that the steaks or chops are of good quality. The most tender cuts of utility and commercial grades are not suitable for broiling.

Formerly, it was thought necessary to broil with the oven at a high temperature in order to sear the meat quickly and keep in the juices. Experiments have shown that broiling can be done most successfully at about 350° F. This moderate temperature results in steak that is more uniformly cooked throughout, less shrinkage, and meat which is more tender. Besides, there will be less heat in the kitchen and no smoking.

Pan-frying is required for breaded meats and for meats which have no fat, such as cubed steak. In the case of breaded pork chops or veal steak, the cooking is generally finished by braising in order to obtain long, slow cooking without the use of too much fat.

Pointers on roasting meat. The first thing to be sure of when you plan to have a roast for dinner is a piece of meat which is tender enough for this type of cookery. A rib roast is one of the tenderest cuts in a beef carcass, but it may not be tender enough to roast if the quality is poor. If you cannot buy government-graded meat, study the appearance of the meat carefully, ask the advice of the butcher, and look for the packer's brand label. Some packers use different brand names for different grades of meat, and these grades are usually reliable.

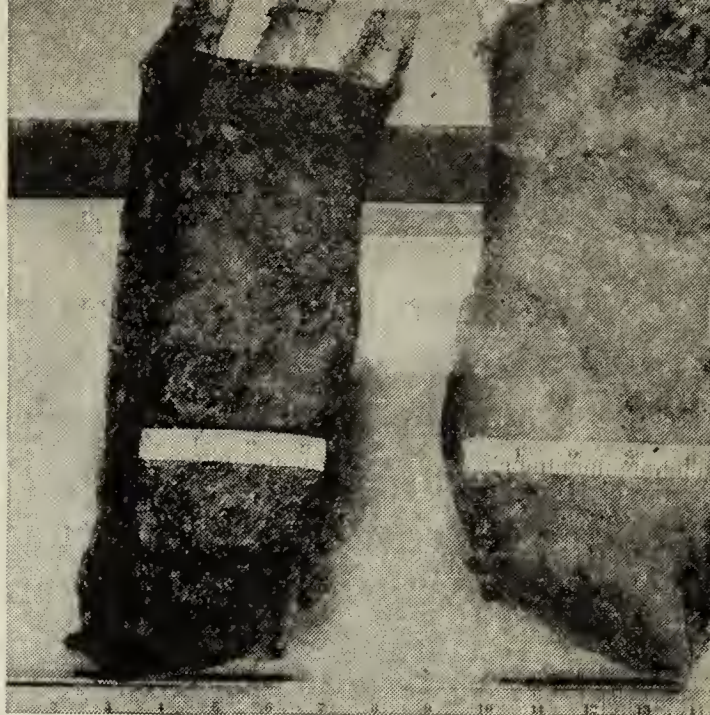
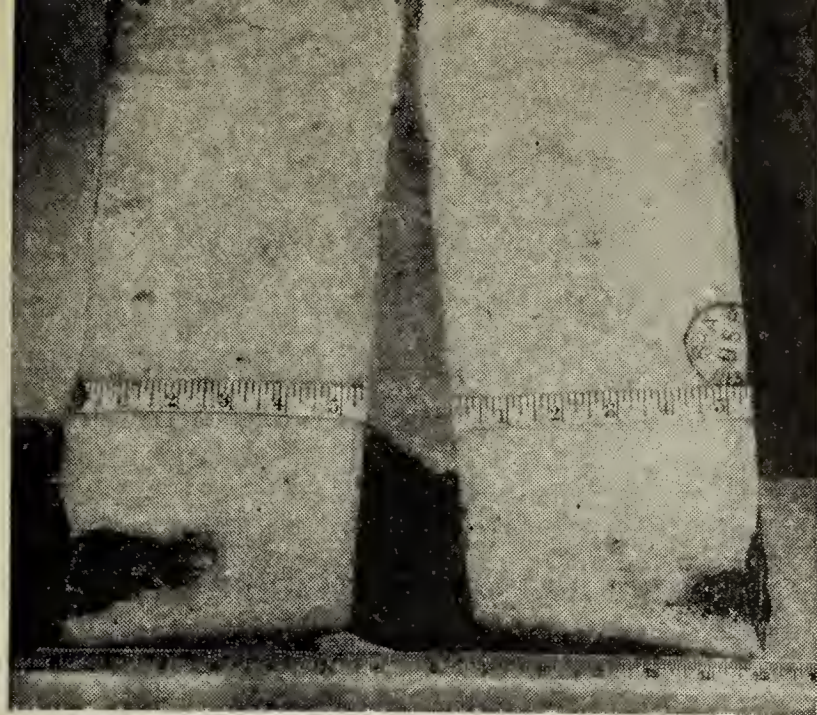
After you are sure that you have a good piece of meat for roasting, remember these things.

1. Use a shallow pan with a trivet or rack so the heat can circulate freely about the meat.

2. If the meat is placed with the fat side up, no basting will be required.

3. Do not cover the meat and do not add water. If it is covered and water is added, the cookery process has been changed from roasting to braising.

4. Avoid high temperatures. Remember the rule for protein cookery. Formerly, it was considered best to start the meat at a very high temperature, thus searing the meat at the very beginning of the cooking period. This was supposed to coagulate a layer of outside protein and hold the juices in the meat. Experiments have proved that high tem-



Robertshaw Thermostat Company

Left: These paired roasts were exactly alike in weight and measurement before roasting. *Right:* The roast at left was roasted at too hot a temperature, resulting in greater shrinkage, and cooking losses. The roast at right was roasted at optimum temperature. Note increased size, palatable appearance of roast, and larger number of servings available.

peratures cause greater losses of juices and greater shrinkage of the meat. The pictures above show what happened to two pieces of meat which were exactly alike in weight and measurement before roasting. The roast on the left was cooked at too hot a temperature, resulting in greater shrinkage and cooking losses. Cooking always causes some loss in the size and weight of meat, but high temperatures greatly increase this shrinkage. Notice in the left-hand picture of the roast how the meat has pulled away from the ribs and decreased in width, as compared with the other roast which was cooked at a lower temperature.

There are several advantages to roasting at low temperatures: minimum shrinkage, meat evenly cooked throughout, fibers plump and full, nicely browned surface, maximum juiciness and tenderness, no spattering in the oven, cool kitchen, low fuel consumption, no watching or attention required for basting.

Examination of the time-temperature tables for meat cookery on pages 340 and 341 shows that 300° F. to 350° F. is recommended for oven roasting. The higher temperature is required for pork in order to be sure that all the dangerous trichinosis germs are destroyed.

5. The length of the roasting time varies with the size of the roast and the degree of desired doneness. Beef may be served rare, medium, or well done, according to personal preference. Lamb may be served medium or well done, but pork and veal should always be thoroughly cooked.

A meat thermometer, such as the one shown on page 338, is a valuable

aid in determining when to take the roast out of the oven. It should be thrust into the thickest muscle and should not rest upon a bone.

Good meat deserves good company! The delicious flavor of perfectly cooked meat is enhanced by good flavors of other foods. Tradition has established certain combinations of meat with other foods which are hard to beat. Pork is good with applesauce or little spiced apples. Lamb calls for mint sauce or currant jelly. With beef roast we like browned potatoes, carrots, and onions. Another standard combination is baked ham with pineapple slices and candied sweet potatoes.

In planning good food combinations, a great responsibility is faced by the homemaker-cook. Appetite-appeal is greatly increased when foods are interestingly combined in the same meal. Besides flavors, the homemaker-cook must think also of food values, so she must also serve as dietician or planner of the family diet. This is a very important factor in every meal, whether a simple luncheon plate or a holiday dinner.

Recipes for meat cookery with dry heat

STEPS IN PAN-BROILING

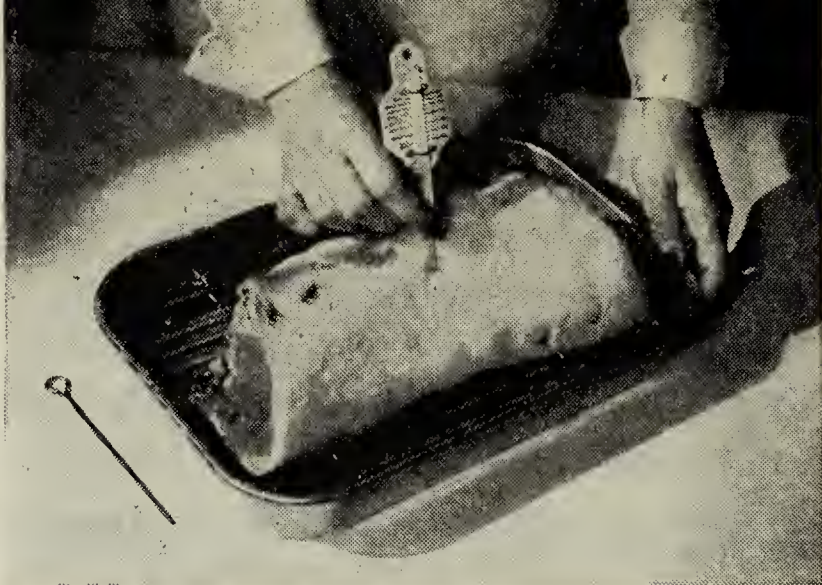
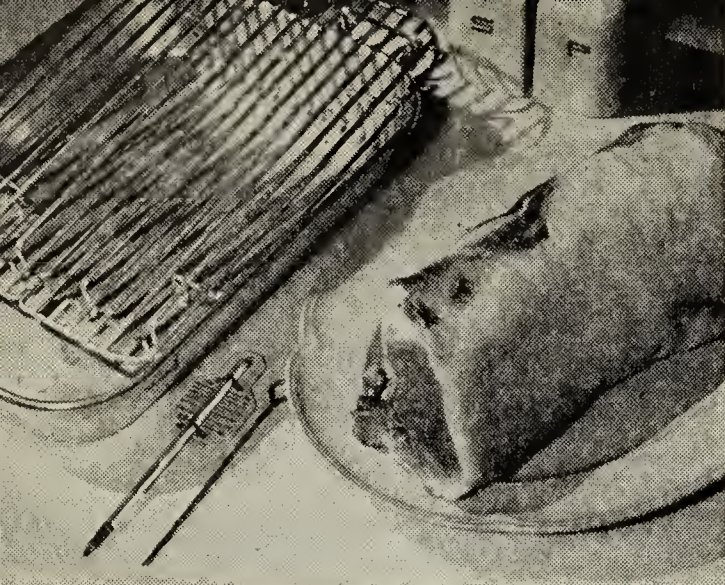
RUB chops and steak with a split clove of garlic, if desired.
PLACE meat in a heavy skillet without any fat.
BROWN meat on both sides.
SEASON with salt and pepper. Do not add water, and do not cover.
REDUCE temperature and turn occasionally until of desired doneness.

STEPS IN OVEN-BROILING

TURN oven regulator to 350° F.
RUB chops or steak with a split clove of garlic, if desired.
PLACE meat on broiler pan 2 to 3 inches from heat.
BROIL until top is brown.
SEASON with salt and pepper and turn.
BROWN other side, season, and serve at once.
TIME required is from 12 to 15 minutes, depending upon the thickness of the meat.
NOTE: A small pan with a rack or trivet to let the fat drip through is much easier to handle and easier to wash than the regular broiler pan in the range.

STEPS IN ROASTING MEATS

RUB meat, if desired, with a split clove of garlic.
SEASON with salt and pepper.
PLACE fat side up on rack in a shallow roasting pan.



Armour and Company

THIS IS THE WAY TO ROAST PORK

Top left: (Step 1) Uncovered baking pan! Fat side up! No water! Place roast on rack if possible. Rub with 1 t. salt to each pound. The illustrated roast is pork loin.
Top right (Step 2) A meat thermometer will tell you exactly when the roast is done. Make a hole with a skewer and insert the thermometer to the center of the meaty part. Let pork roast thoroughly, cooking to an internal temperature of 185 F.

Bottom left: (Step 3) Low oven temperature prevents shrinkage. Turn over to 350 F. for roast pork and let cook 30 minutes per pound if pork loin, 35 minutes per pound if pork shoulder.

Bottom right: The perfect finished product is thoroughly and evenly cooked, well browned, juicy, and flavorful. It has held its shape and has the maximum serving per pound of purchased meat.

TOMATO SAUCE

1 $\frac{1}{4}$ c. canned tomatoes

$\frac{1}{4}$ t. salt

$\frac{1}{4}$ t. sugar

1 T. flour

$\frac{1}{2}$ T. butter or fortified margarine

$\frac{1}{2}$ t. grated onion

Few drops Worcestershire sauce

COMBINE 1 $\frac{1}{4}$ c. canned tomatoes, $\frac{1}{4}$ t. salt, $\frac{1}{4}$ t. sugar and simmer for 12 to 15 minutes. Strain.

MELT $\frac{1}{2}$ T. butter or fortified margarine and add 1 T. flour and few drops Worcestershire sauce.

ADD tomatoes and heat to boiling. Stir constantly.

SERVE with meat loaf or fish.

HAM LOAF

1 lb. ham, ground	1 c. milk
$1\frac{1}{2}$ lbs. lean pork, ground	$\frac{3}{4}$ c. brown sugar, firmly packed
1 c. bread crumbs	$\frac{1}{4}$ c. vinegar
2 eggs	$\frac{1}{4}$ c. water
$\frac{1}{2}$ t. salt	1 t. dry mustard

MIX 1 lb. ham, $1\frac{1}{2}$ lb. pork, $\frac{1}{2}$ t. salt, and 1 c. bread crumbs together.

TURN oven to 325° F.

BEAT 2 eggs; add 1 c. milk; then mix thoroughly with meat; make mixture into a loaf and place in a shallow baking pan.

COMBINE $\frac{3}{4}$ c. sugar, 1 t. mustard, $\frac{1}{4}$ c. vinegar, and $\frac{1}{4}$ c. water; pour over ham loaf, and bake in a slow oven (325° F.) for 2 hours, basting occasionally with the sugar mixture.

SERVE on a warm platter; garnish with parsley or cooked vegetables such as green beans or carrots.

NOTE: This is an excellent meat to take to a picnic, and it is superb for sandwiches.

BAKED HAM SLICE

SERVES 4

1 slice of ham, 1 inch thick	$\frac{1}{4}$ t. ground cloves
1 t. prepared mustard	1 c. pineapple juice
$\frac{1}{4}$ c. brown sugar, firmly packed	4 pineapple rings

TURN oven to 350° F.

PLACE ham in baking dish and spread with mustard.

MIX $\frac{1}{4}$ c. sugar and $\frac{1}{4}$ t. cloves together and sprinkle on top of ham.

POUR 1 c. pineapple juice in baking dish and bake ham uncovered in a moderate oven (350° F.) until almost tender, about 1 hour.

PLACE 4 pineapple rings on top of ham and bake until rings are delicately brown. Serve on a warm platter with pineapple rings on top of ham.

NOTE: A baked ham slice, candied sweet potatoes (page 80), buttered cauliflower (page 281), and pumpkin pie (page 254) make a good combination.

TIME TABLE FOR ROASTING MEAT

ROAST	OVEN TEMPERATURE	STAGE OF DONENESS	INTERNAL TEMPERATURE		WEIGHT	APPROXIMATE TIME PER POUND
	<i>degrees F</i>		<i>degrees C</i>	<i>degrees F</i>	<i>pounds</i>	<i>minutes</i>
Beef	300					
Standing ribs						
1 rib		Rare	60	140	2	33
2 ribs					3 to 4	28 to 35
2 ribs					4 to 5	26 to 30
					6 to 8	18 to 20
1 rib		Medium	71	160	2	45
					6 to 8	22 to 25
1 rib		Well-done	77 to 80	170 to 176	2	50
2 ribs					3 to 4	43 to 75
2 ribs					4 to 5	45 to 70
2 ribs					5 to 6	40 to 60
					6 to 8	27 to 30
Rolled ribs		Rare	60	140	6 to 8	32
		Medium	71	160	6 to 8	38
		Well-done	77	170	6 to 8	48
Chuck ribs			66 to 77	150 to 170	5 to 8	25 to 30
Rump			66 to 77	150 to 170	5 to 7	25 to 30
Lamb	300	Well-done	79 to 82	175 to 180		
Leg					6½ to 7½	25 to 30
Shoulder, bone in					4½ to 5½	25 to 30
Shoulder, rolled					3 to 4	35 to 40
Cushion					3 to 4	25 to 30
Pork—fresh	350	Medium well	77	170		
Loin						
center					3 to 4	35 to 40
whole					12 to 15	15 to 20
ends					3 to 4	45 to 50
Shoulder						
whole					12 to 14	30 to 35
boned & rolled					4 to 6	40 to 45
cushion					4 to 6	35 to 40
Pork butt					4 to 6	45 to 50
Fresh ham					10 to 12	30 to 35
Pork—smoked	300	Well-done	77	170		
Ham						
whole					10 to 12	25
half					6	30
shank end					3	40
butt end					3	45
Cottage butt					2 to 4	35
Picnic					3 to 10	35
Pork—smoked—tendered	300	Well-done	71	160		
Ham						
whole					10 to 12	15
half					6	20

PAN-FRIED FRANKFURTERS

SERVES 4

- 8 frankfurters, raw or boiled 1½ to 2 T. bacon drippings
- MELT 1½ to 2 T. bacon drippings over low heat and pan-fry 8 frankfurters, whole or split in half, until moderately brown on all sides.
- SERVE immediately on split toasted buns with mustard, catsup, or pickle relish.

ROAST STUFFED SHOULDER OF LAMB

SERVES 5-6

- 3 to 4 lbs. boned shoulder of lamb 1 t. salt
 (bones for gravy) ⅛ t. pepper
2 c. water 1 garlic clove

Stuffing

- 2½ c. soft bread crumbs ½ t. salt
1 T. chopped onion ¼ t. celery salt
1 T. chopped parsley ¼ t. pepper
1 c. diced celery 1½ T. butter or fortified margarine
⅛ t. marjoram or curry powder 2½ T. stock

- RINSE bones; add 2 c. water; bring to boiling point and simmer for one hour.
- SPRINKLE the inside pocket of the shoulder with 1 t. salt and ⅛ t. pepper.
- MELT 1½ T. butter or fortified margarine and cook 1 T. chopped onions until yellow-colored; add 1 T. chopped parsley and cook for 5 minutes; remove from heat; add 2½ c. soft bread crumbs, ½ t. salt, ¼ t. celery salt, ¼ t. pepper, and ⅛ t. marjoram or curry powder; mix well.
- TURN oven to 300° F.
- FILL the pocket loosely with stuffing and sew or skewer the opening closed. A cord lacing between the skewers will make it more secure.
- PLACE lamb on rack or trivet, fat side up, and bake uncovered in a very slow oven (300° F.), allowing 40 to 45 minutes per pound.
- TO PREPARE gravy, use 3 T. flour, ½ t. salt, F. G. pepper, 1½ c. stock, and 1 t. gravy coloring. This may be made ahead of time, pouring the meat drippings in after the roast is cooked.
- NOTE: Roast stuffed shoulder of lamb, buttered peas and carrots (page 280), and baked tomato halves (page 32) are good together.

Ways to use leftover meats

LAMB CASSEROLE

SERVES 4

1½ c. cubed leftover leg of lamb	1 T. bacon drippings
2 medium boiled potatoes, cubed	1 c. (or more) gravy
5 mushrooms, sliced	1 t. Worcestershire sauce
2 medium onions, sliced thin	½ t. salt

TURN oven to 350° F. Grease baking dish.

SAUTÉ 2 onions and 5 mushrooms in 1 T. bacon drippings.

MIX 1½ c. lamb, 2 potatoes, ½ t. salt, 1 t. Worcestershire sauce, and 1 c. gravy together with onions and mushrooms. Place in a baking dish.

BAKE in a moderate oven (350° F.) for ½ hour.

NOTE: A lamb casserole, cabbage salad (page 29), hot biscuits (page 128), and apple crisp (page 105) are a good combination.

BAKED HASH

SERVES 4

1½ c. cooked ground beef or lamb	F. G. celery salt
1½ c. cooked diced potatoes	F. G. cayenne
¼ c. onion, ground	¼ t. salt

GRIND 1½ c. meat and 1 onion in a food chopper. Add 1½ c. potatoes, F. G. celery salt, F. G. cayenne, and ¼ t. salt; mix well.

TURN oven to 400° F.

GREASE a baking dish and pack hash in gently. Bake in a moderately hot oven (400° F.) for 25 to 30 minutes, or until it is heated through and a golden-brown crust is formed. Place baking dish on a plate and serve at the table, or cut into squares and arrange on a platter.

NOTE: Baked hash, baked tomatoes (page 32), and baked apples (page 103) make a good oven dinner.

SHEPHERD'S PIE

SERVES 4

1½ c. leftover beef, lamb, or chicken	1¼ c. gravy
3 c. hot mashed potatoes	

TURN oven to 375° F.

GREASE a baking dish and line the sides and bottom with part of the mashed potatoes, leaving enough for a thin layer for the top.

MIX 1½ c. meat and 1¼ c. gravy together, and place on potatoes in baking dish. Top with mashed potatoes.

- BAKE** in a moderate oven (375° F.) until potatoes are brown and the pie is heated through. Place baking dish on table to serve.
- NOTE:** Shepherd's Pie, buttered asparagus (page 278), grapefruit and avocado salad (page 52), and Spanish cream (page 187) are suggested for a winter meal.

HAM À LA PERRY

SERVES 4

- | | |
|------------------------------------|------------------|
| 1¼ c. diced, cooked ham | 4 T. flour |
| 1 T. pimento, cut in small pieces | ½ t. salt |
| 1 T. chopped green pepper | ⅓ t. celery salt |
| 1 T. chopped parsley | F. G. cayenne |
| 2 T. butter or fortified margarine | 2 c. milk |
- MELT** 2 T. butter or margarine in a frying pan; add 1 T. green pepper; stir and cook slowly for 5 minutes.
- MIX** 4 T. flour, ½ t. salt, ⅓ t. celery salt, and F. G. cayenne. Slowly add 2 c. milk and cook until thick, stirring constantly. Let stand over hot water for 30 minutes without cooking.
- ADD** 1¼ c. ham, 1 T. parsley, and 1 T. pimento; heat over hot water for 15 minutes.
- SERVE** on rounds of toast or on crisp hot noodles.

STEW MADE WITH LEFTOVER MEAT AND GRAVY

SERVES 4

- | | |
|---|------------------------------------|
| 1½ c. leftover lamb or beef, cut in 1-inch pieces | 4 medium-sized onions |
| 1 c. gravy | ¾ c. sliced carrots, ½ inch thick |
| bones from roast | 2 c. potatoes cut in 1-inch wedges |
| ½ c. water | See recipe of dumplings below. |
- PLACE** bones, 4 onions, ¾ c. carrots, and 2 c. potatoes in kettle with ½ c. water; cook for 10 minutes. Add 1 c. gravy and 1½ c. meat; bring to boil. Directions for dumplings below.
- COOK** at low heat for 20 minutes.
- NOTE:** Tomato salad (page 29) is suggested to serve with stew.

DUMPLINGS FOR STEW

4 DUMPLINGS

- | | |
|-------------------|--------------------|
| 1 c. sifted flour | 2 t. baking powder |
| ¼ t. salt | ½ c. milk, cold |
- SIFT** flour and measure 1 c.; add 2 t. baking powder and ¼ t. salt; sift in a bowl. Cover tightly and chill in the refrigerator.

MAKE a well in the flour; add $\frac{1}{2}$ c. milk; stir lightly.
DROP on hot stew in four equal parts. Cover kettle tightly and simmer stew for 20 minutes without removing the cover at any time until cooking period is completed.

CHOW MEIN

SERVES 4-5

2 c. cooked chicken or lean pork, cut in 1-inch cubes	4 medium-sized onions, sliced
1 c. chicken or pork stock	2 T. shortening
1 can bean sprouts	1 T. chow mein sauce
1 c. mushrooms, sliced	$\frac{1}{8}$ t. pepper
1 c. celery, cut in small pieces	$\frac{3}{4}$ t. salt
	1 can chow mein noodles

HEAT 2 T. fat in a heavy skillet, and slightly brown 4 onions and 1 c. celery. Add 1 c. mushrooms, 1 can sprouts, and 1 c. stock; simmer for one hour.

PLACE can of noodles in hot water and heat.

ADD 2 c. meat, 1 T. sauce, and $\frac{1}{8}$ t. pepper and $\frac{3}{4}$ t. salt.

SIMMER for $\frac{1}{2}$ hour.

SERVE on a warm platter and surround with heated chow mein noodles.

CLASS ACTIVITIES

1. Investigate the prices of club, T-bone, porterhouse, and sirloin steaks in your stores. Which cost the most per pound? Which cut generally has the most edible meat?

2. Investigate the cost of canned meats and compare the cost with fresh meats.

3. Give three "do nots" in roasting meats.

4. Survey the meat-eating habits of the members of the class. What meats are eaten most often by yourself? What methods of meat cookery are used most often in your family meals?

5. When can less-tender meat be successfully baked? Broiled? When should tender cuts be braised? Give reasons in each case.

FUN WITH FOOD AT HOME

1. For an outdoor cooking party plan a weiner roast or a steak fry. What have you learned about cooking meats that will help you in this kind of cooking?

2. Add to your recipes: basic recipe for roasting; basic recipe for broiling; three suggestions for combinations of broiled meat with other foods; and three combinations of roast meats with other foods that you especially like.

5. Fish for your protein dish

Fish are an important part of the protein food family. These flesh foods from river, lake, and ocean have been used as food since prehistoric times. Today, fish is often used for the main dish at luncheon or dinner, and is very popular with many people. Every homemaker-dietician should plan to include fish occasionally in the family meals. Those who live inland should sometimes select ocean fish for iodine content instead of depending entirely upon the fresh-water varieties from local sources.

The selection of fish, its care, and its cookery is a large subject, but we can learn some of the important things about it in this brief study-problem. Whether you catch your own fish or buy it in a market, you should know how to take care of it and prepare it for the table.

Pointers on buying fish. Fish may be bought fresh, frozen, canned, salted, dried, or smoked. Freshness at the time of cooking or processing is the most important quality in good fish. Fish deteriorates rapidly and, if possible, should be used on the same day that it is caught. If it is to be frozen, the process should be completed within a very short time after the fish has been taken from the water. Canning and other forms of processing should be started immediately after the fish has been caught.

A few pointers on the selection of good-quality fish are given in the following:

1. Fresh fish is *firm* and *elastic*. If pressed by the finger, the flesh springs back into place.

2. If you are buying a whole fish, observe the eyes, which should be *bright*. The *gills* should be *bright red*.

3. Avoid fish with a stale or sour odor.

4. Frozen fish is generally a good buy if you live at a distance from the source of supply. Quick-frozen fish is as nutritious, palatable, and safe as fresh fish if kept frozen until ready for cooking.

5. Avoid fish which was shipped frozen but has been allowed to thaw in the market. Staleness and deterioration occur soon after thawing.

6. Insist on quick-frozen fish because loss of nutrients and flavor take place when the fish is frozen slowly. Considerable dripping and leakage occur when slow-frozen fish is thawed.

7. When you buy canned fish, read the label carefully for the type



National Dairy Council

This is the way to prepare fish fillets for broiling.

of contents, the amount, and the statement guaranteeing that the contents have been inspected.

Care of fish at home. Home storage of fish requires facilities for freezing it, if it is to be kept for any length of time. If you are lucky with your fishing pole, and wish to keep some of your fish for future eating, freeze fish quickly on the same day that it is taken from the water, and keep it hard-frozen.

Even when kept on ice, fish remains in prime condition for only a few hours, and after a few days it is not safe to eat. Extreme care should be taken to keep fish cold at all times.

When you buy frozen fish, do not allow it to thaw until you are ready to use it. It should never be thawed and refrozen.

When stored in the refrigerator, fresh fish should always be tightly covered or well wrapped. The odor will contaminate other foods if it is allowed to escape into the refrigerator.

Hands can be cleaned from "fishy" odors by washing them in hot water and salt, and washing off the salt before using soap and water.

CLASS PROJECT: LUNCHEON PLATE WITH SCALLOPED OR CREAMED FISH.

Plan a luncheon plate with a dish made from flaked fish and with vegetables.

1. Since you have already had experience in making creamed and scalloped dishes and in preparing vegetables, you should be able to do this project without a demonstration of the techniques.

2. Plan a menu which is good, economical, and easily prepared. The fish may be previously prepared by boiling, may be obtained from a can, or may be a leftover. The vegetables may be served either raw or cooked. The important point is to plan a good combination of foods.

3. Plan a work schedule which will provide for the fish and vegetables to be ready at the right time.

4. Lay a cover and serve the plates. Remember your eating manners.

What kind of fish to buy. Dozens of varieties of fish are sold in our markets. Fresh fish vary in kind from season to season, but frozen fish are available at all seasons of the year. Naturally, some types of fish are more readily obtained in some localities than in others. Among the more common varieties of fresh-water fish are bass, perch, pike, and trout. All these are lean fish, which is typical of most fresh-water varieties.

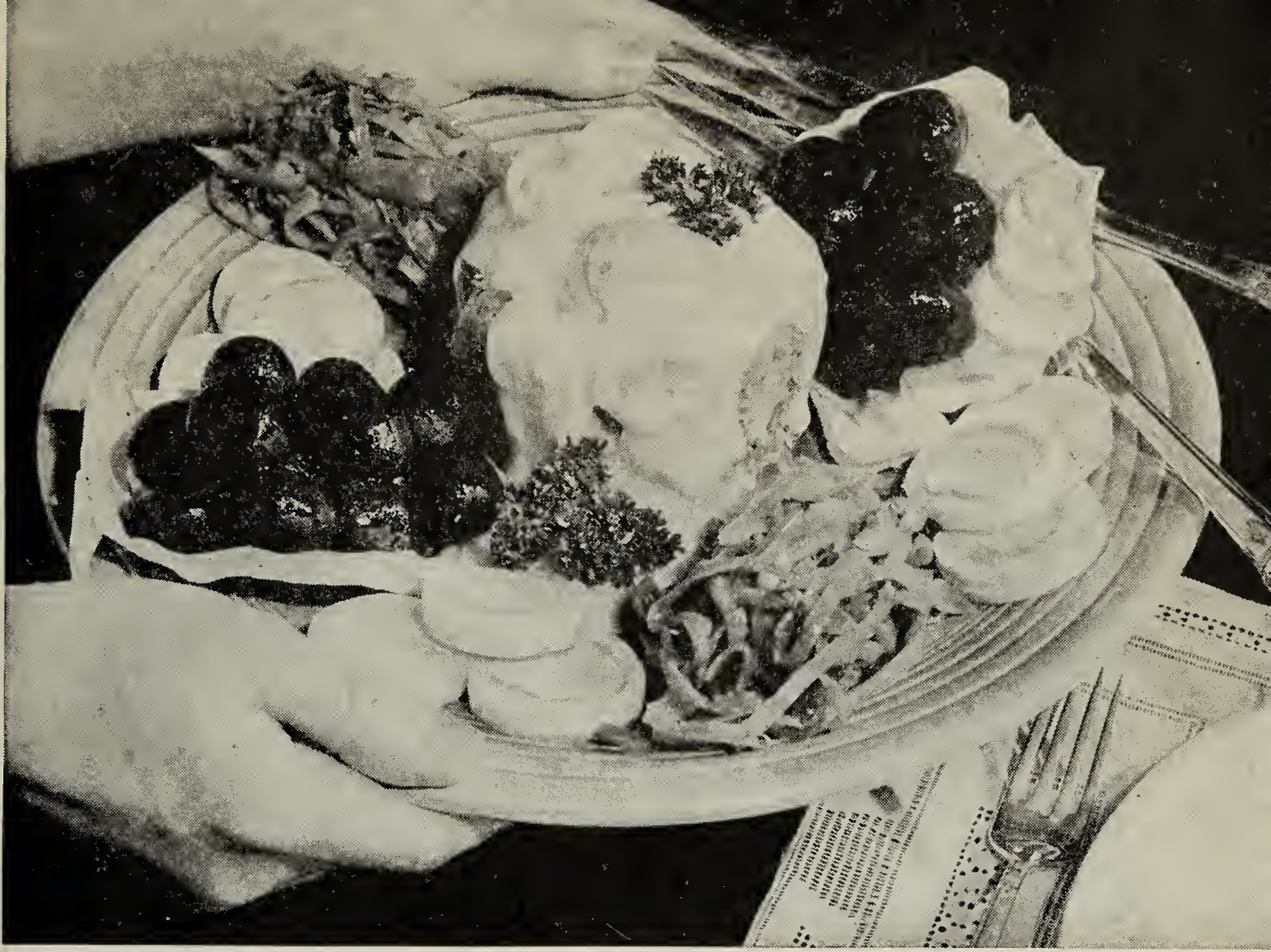
Common varieties of lean salt-water fish are flounder (or sole), haddock, and cod. Among the fat-containing ocean fish are halibut, mackerel, salmon, and shad. The homemaker-dietician may wish to know which fish are rich in fat because they are good sources of vitamins A and D. Besides this, she will remember that most salt-water fish are a good source of iodine.

Other sea foods—oysters, clams, scallops, shrimp, crabs, and lobster—are great favorites with many people and are prepared in many delicious dishes.

Fish are sold whole or cut. The buyer may choose whole fish, steaks, or fillets [fil-lays'] for her fish dinner. The whole fish may be large enough to bake or small enough to pan-fry. They may be cooked with or without the heads and with or without the fins, as the buyer prefers.

Fish steaks are obtained by cutting the fish crosswise into slabs at least $\frac{5}{8}$ of an inch thick. This is done only with large fish such as salmon or halibut.

Fish fillets are cut lengthwise from the sides of the fish and are boneless. When the fillets from both sides of a fish are left attached by the flesh under the belly, the cut is called a "butterfly fillet."



American Can Company

This attractive supper plate includes salmon loaf with white sauce, hot pickled beets, buttered string beans, and a garnish of hard-cooked eggs, lettuce, and parsley.

Methods of fish cookery. The same cookery processes which are used for meat and other foods are adapted to fish. The all-important rule for cooking protein foods should always be observed. "Boiled" fish should be simmered or steamed. This method of preparation is especially well chosen for fish which is to be flaked and used in soufflé, salad, or casserole dishes.

Broiling, pan-broiling, and pan-frying are good methods for small fish, steaks, and fillets. Baking, rather than roasting, is the term used for oven-cooked fish. Large portions of fish steak or fillet and whole fish can be baked successfully. A whole fish (family size) stuffed with bread dressing makes an excellent main dish for dinner. Stuffing between two layers of steak adds interest and flavor.

Sauces and other foods with fish. Because of its mild flavor, a tart sauce or lemon garnish is generally served with fish. Pickle sauce, tartar sauce, creole sauce, or lemon juice squeezed from the garnish slices are all excellent with fish. Many vegetables, such as potatoes, broccoli, carrots, tomatoes, and beets, combine well with fish for appetizing dinners.

Recipes for fish cookery

PAN-FRIED FISH

SERVES 4

1½ lb. fish fillets
3 T. flour

2½ T. bacon drippings
salt and pepper

CUT fillets in four serving-sized portions and roll in 3 T. flour.

HEAT 2½ T. bacon drippings in a heavy skillet, place fillets flesh side down in skillet, and brown at moderate heat; turn, salt and pepper, and

SERVE with lemon wedges or slices.

NOTE: Pan-fried fish, parsley buttered potatoes (page 70), creamed peas (page 82), and cole slaw (page 29) make a good fish dinner.

OVEN-FRIED FILLETS

SERVES 4

1½ lbs. fillets
¾ t. salt
¾ c. fine bread or cracker crumbs
F. G. pepper

¾ c. milk
3 T. melted butter, fortified margarine, or bacon drippings

CUT fillets into four serving-sized portions.

ADD ¾ t. salt and F. G. pepper to ¾ c. milk. Grease baking pan well.

TURN oven to 500° F.

DIP each piece of fish into milk, and then into ¾ c. fine bread or cracker crumbs, and place skin side down in baking pan.

POUR over the fish, 3 T. melted butter, fortified margarine, or bacon drippings; place pan on rack near the top of oven and bake in a very hot oven (500° F.) for 10 to 12 minutes. Fish should flake easily with a fork when done.

SERVE on a warm platter, garnished with paprika, lemon wedges, and parsley.

NOTE: Oven-fried fillets, scalloped potatoes (page 76), buttered broccoli (page 279), and cucumber and tomato salad (page 31) make an attractive plate.

CREAMED TUNA FISH

SERVES 4-6

1 1-lb. can tuna fish
2 c. medium white sauce (page 74)

1 T. chopped pimento
slices of toast, boiled rice, or noodles

PREPARE 2 c. medium white sauce and let stand for 30 minutes over hot water.

DRAIN and flake 1 lb. fish coarsely; add 1 T. pimento; add fish to white sauce.

HEAT mixture over boiling water 10 minutes.

SERVE on pieces of toast, boiled rice, or noodles.

NOTE: A noodle ring with the center filled with creamed tuna, and surrounded with buttered peas, makes a good buffet main dish.

QUICK SALMON PIE



Libby, McNeill and Libby

SERVES 5-6

1 No. 1 can salmon, drained and flaked	$\frac{3}{4}$ c. grated American cheese
2 c. medium white sauce (page 74)	$\frac{1}{2}$ recipe baking powder biscuits (page 128)
1 c. cooked peas	

PREPARE 2 c. white sauce. Add 1 c. peas, 1 can flaked salmon, and $\frac{3}{4}$ c. grated cheese. Mix gently. Place in greased casserole.

TURN oven to 450° F.

MAKE biscuit dough. Roll $\frac{1}{4}$ inch thick, cut into small biscuits, and place on top of salmon mixture. Bake in a hot oven (450° F.) for 20 minutes or until biscuits are a golden brown.

BAKED STUFFED FISH

SERVES 5-6

- | | |
|--|------------------------|
| 1 3-4 lb. fish, dressed (minus bone, head, and scales) | 3 T. milk or water |
| 1½ t. salt | ½ c. chopped celery |
| 4 T. bacon drippings | 2 T. chopped parsley |
| 3 T. butter or fortified margarine | ¼ c. chopped onion |
| 2½ c. day-old bread crumbs, cut in ½-inch cubes | ½ t. salt |
| | ¼ t. poultry seasoning |
| | 1 T. lemon juice |

- MELT** 3 T. butter or margarine in skillet; add ¼ c. onion and ½ c. celery; sauté until tender.
- TURN** oven to 350° F.
- MIX** 2½ c. bread crumbs, 2 T. parsley, 1 T. lemon juice, ½ t. salt, ¼ t. poultry seasoning, 3 T. milk, and cooked vegetables together.
- WASH** and dry fish; sprinkle with 1½ t. salt. Fill with stuffing and fasten together with skewers. Lace with heavy white thread or string.
- PLACE** in a baking pan; brush with 4 T. bacon drippings and bake in a moderate oven (350° F.) 40 to 60 minutes.
- REMOVE** skewers and thread and place fish on a warm platter. Garnish with lemon wedges or slices. Sprinkle with paprika if desired.
- NOTE:** Another fish dinner: baked stuffed fish, French fried potatoes, buttered green string beans (page 278), and tossed vegetable salad (page 280).

SALMON LOAF

SERVES 5-6

- | | |
|--------------------------------|--------------------------------------|
| 1 1-lb. can pink or red salmon | ½ c. liquid (salmon juice and water) |
| 1½ c. bread crumbs | 1 T. lemon juice |
| ¾ c. chopped celery | ½ t. baking powder |
| 2 eggs, beaten | 1 t. salt |
| ½ c. milk | |
| F. G. cayenne | |

- DRAIN** 1 lb. salmon; remove bones and skin, and flake.
- GREASE** a bread pan. Turn oven to 350° F.
- BEAT** 2 eggs; add ½ c. milk and ½ c. liquid.
- COMBINE** salmon, 1½ c. bread crumbs, 1 T. lemon juice, egg mixture, 1 t. salt, and F. G. cayenne. Make into a loaf, and place in greased pan.
- BAKE** in a moderate oven (350° F.) for 30 to 40 minutes, or until brown and firm.
- LOOSEN** edges of salmon loaf from pan; invert on warm platter, and garnish with celery tops or parsley. Serve with egg sauce (page 354) or tomato sauce (page 338).

- HEAT fat to 375° F. (hot enough to brown a 1-inch cube of bread in 60 seconds).
- SHAPE fish mixture into cone-shaped molds; roll in crumbs, dip in beaten egg, and roll again in crumbs.
- FRY in deep fat 375° F. until a delicate brown. Drain on clean absorbent paper. Serve with egg sauce (see below), tomato sauce (page 338), or tartar sauce (see below).
- NOTE: Fish croquettes, buttered summer squash (page 284), and buttered lima beans (page 82) make a quickly prepared meal.

EGG SAUCE

- 1 c. medium white sauce 2 hard-cooked eggs, finely chopped
- PREPARE 1 c. white sauce and let stand over hot water 30 minutes. Add 2 chopped hard-cooked eggs. Serve hot.

TARTAR SAUCE

- 1 c. mayonnaise 1 t. onion juice
 1 T. chopped pickle 1 T. chopped parsley
 1 T. chopped olives
- MIX 1 c. mayonnaise, 1 T. pickle, 1 t. onion juice, 1 T. parsley, and 1 T. olives together; chill.
- NOTE: This sauce is delicious with fillets and scallops.

LEMON BUTTER SAUCE

- ½ c. melted butter 1 clove of garlic
 1 T. lemon juice 3 T. chopped parsley
- HEAT ½ c. butter over low heat and brown garlic slightly. Remove garlic. Add 1 T. lemon juice and 3 T. parsley; heat thoroughly.

CREOLE SAUCE

MAKES 2 CUPS

- 1 can tomato soup 2 T. butter or fortified margarine
 2 T. minced onion ½ t. salt
 ¼ c. chopped green pepper ¼ t. paprika
 6 stuffed olives, sliced
- MELT 2 T. butter or margarine in a saucepan and sauté 2 T. onion and ¼ c. pepper for 5 minutes. Do not brown.
- ADD 1 c. soup, 6 olives, ½ t. salt, and ¼ t. paprika; simmer for 10 minutes.
- NOTE: This sauce is excellent for baked or steamed fish.

FISH CHOWDER

SERVES 5-6

1/3 lb. fat salt pork, cut in 1/2-inch cubes	1 1/2 c. sliced raw potatoes
1 lb. fresh or frozen cod or haddock fillets	1/2 c. water
1/3 c. sliced onions	3 c. milk
	3/4 t. salt
	1/8 t. pepper

PLACE 1/3 lb. salt pork in a heavy kettle and fry over low heat until a golden brown. Remove pork from fat and save until chowder is finished.

ADD 1/3 c. onions to fat and cook until yellow-colored. On top of onions place 1 1/2 c. potatoes, 3/4 t. salt, 1/8 t. pepper, 1/2 c. water, and, lastly, 1 lb. fillets flesh side down; cook until tender.

REMOVE skin from fillets and break into coarse flakes. Add 3 c. milk and slowly heat. Add pieces of salt pork and more seasoning if necessary.

SERVE hot with crisp chowder crackers.

NOTE: New England style chowder has milk, while Manhattan style has tomatoes. Try each to see which you prefer.

OYSTER STEW

SERVES 4

1 pt. stewing oysters	3 T. butter
4 c. milk	1/2 t. salt
1/8 t. pepper	

SCALD 4 c. milk; add 3 T. butter, 1/2 t. salt, and 1/8 t. pepper.

PICK over 1 pt. oysters; remove any pieces of shell; heat oysters in their own liquid until the edges curl; then add to milk.

SERVE hot with oyster crackers.

CLASS ACTIVITIES

1. What kinds of fish are available in your local markets? How do the prices per pound for fish steaks and fillets compare with prices for lean meat? How do you think they compare in flavor?

2. How many times per month do you have fish for dinner? Do you think the family food budget could be cut down by a more frequent use of fish?

3. What nutrients are abundant in fatty fish and in ocean fish that are entirely lacking in lean beef, or supplied only in small amounts?

4. Plan three complete dinner menus, using fish as the main dish. Try to plan well-balanced meals which are attractive in appearance and good in flavor combinations.

FUN WITH FOOD AT HOME

1. Plan a fish-fry party. Small fillets, fried in shallow fat or deep fat and placed between slices of bread or in buns, make good refreshments for outdoor or clubhouse parties. Fish sandwiches served from a counter with plenty of relishes and sauces available are popular.

2. Serve a fish dinner for your fishermen friends who are lucky enough to catch the fish.

3. Serve your family with a fish dinner.

4. Compute the cost of the family meat bill per week, with and without fish served one day a week.

5. Add two basic recipes for cooking fish to your personal recipe book. Add, also, at least one recipe for fish sauce.

6. *Chicken for dinner: a tradition*

A chicken dinner has long been considered the best that graces the American table. Special ways of preparing the bird have become traditional in different parts of the country. Southern fried chicken is famous the world over; chicken à la Maryland is another tempting dish. Gumbo chicken, one of the most famous dishes of the South, was originally developed by the Creoles in Louisiana. Country fried chicken and roast chicken are associated with the New England and Middle Western states.

In many families chicken for Sunday dinner is a standard main dish, and chicken frequently forms the special feature for holiday dinners. There are many good ways to prepare it as a main dish, and also in salads, soups, and sandwiches. Everyone should learn how to select the type and quality of chicken for the method of cooking, how to store it in the home kitchen, and how to prepare it properly.

Select the bird by age and size. Age is the most important factor in choosing a chicken because the method of cooking and the tenderness depend on it. In general, chickens which are less than a year in age are tender eating, and those which are more than a year are less tender. Study of the Buying-Cooking Guide for Chickens on page 359 shows that the birds are sold under several different names, depending upon their age and weight. Since these names—broiler, fryer, roaster, capon, pullet, and fowl—are used in the retail market, the shopper should know what each one of them means. The term “stewer” is sometimes used instead of fowl.

In comparison with other protein foods, chicken is generally most expensive. This happens because there is more bone in relation to the flesh than in meat or fish. As you can see by study of the table, the fowl is the most economical to buy. It requires a minimum of $\frac{1}{4}$ pound per person. Besides, this fowl is always cheaper per pound than the other varieties. It is suitable only for braising or stewing, but there are many delicious ways of serving it, including gumbo, creamed and scalloped dishes, chicken à la king, and chicken pie.

Appearance of good-quality chicken. The experienced buyer learns many points to look for in the selection of a good chicken.

1. The flesh should be firm, but not stiff or flabby.
2. The skin should be yellowish in tint, not bluish.
3. The breastbone should be well covered and the thighs plump.
4. The bird should be heavy for its size.
5. In young birds the breastbone or keel is flexible; in older birds it is rigid.
6. In young birds the skin is thin; in older birds it is thick and coarse.
7. In young birds the feet are smooth and yellow.

Chickens come fresh or frozen. Freshness is an essential characteristic of good chicken. As in the case of other protein foods, low temperatures are required for preserving freshness. Chicken should be chilled immediately after it has been killed, and should be shipped in refrigerated cars. Four types of poultry are available in retail markets:

1. Live poultry which is selected by the consumer before it is killed. Many people prefer to choose their chickens "on the hoof."

2. Fresh-dressed poultry which has been recently killed. It should be kept cold in refrigerated showcases. Obviously, it should not be kept long.

3. Fresh hard-chilled or fresh-chilled poultry is frozen by the slow-freezing process and is frozen only enough to keep it in good condition until it reaches the retail market. Most poultry in the market is prepared by this process. It should not be allowed to thaw before it leaves the market or in the home kitchen until time for it to be cooked.

4. Quick-frozen poultry is frozen very quickly at subzero temperatures. This quick freezing prevents the formation of large ice crystals which cause loss of juices in thawing and cooking. Quick-frozen poultry may be stored for many months without loss of quality. Some people object to cold-storage poultry, but their prejudice is not well founded. Cold-storage poultry is often superior in flavor and tenderness to fresh-dressed or fresh-chilled poultry.

Government-graded poultry. The federal government maintains a grading service for poultry similar to that for meat. Any dealer who wishes to have his birds graded can have it done by specially trained graders at very little expense. Consumers should learn to depend on this service and to insist upon it. The grades for young chickens are as follows:

U. S. Special is a young, fine-grained, soft-meated bird with broad breast. The skin is soft and smooth and free from bruises. It is well covered with fat.

U. S. Prime is a young, soft-meated bird with smooth skin but may show slight skin bruises. It is well covered with fat.

U. S. Choice is a young, fairly well-fleshed bird. It may have a few scattered pin feathers and not more than three bruises. It may have a slight deformity, such as a broken wing or leg, providing the bone does not protrude through the flesh. It is fairly well covered with fat.

U. S. Commercial is a young poorly fleshed bird. It may have many pin feathers and many bruises. It is poorly covered with fat.

Care of poultry in the home kitchen. The watchword for storing poultry in the home kitchen is the same as for meat, fish, and eggs—low temperatures. Fresh-chilled and quick-frozen chicken should not be allowed to thaw until just before it is prepared for cooking. It should never be thawed and refrozen. Chicken is a highly perishable food and must be kept cold when raw. Leftover cooked chicken should be chilled as soon as possible, and kept cold.

Methods of cooking poultry. The same cooking processes used for meat and fish can be used for chickens and other poultry. Broiling, frying, roasting or baking, braising, and simmering are well adapted for poultry cookery, depending upon the age of the bird and the type of dish desired.

There are two general rules which apply to poultry cookery. The first rule is the familiar one which applies to all protein cookery. *Cook at low temperatures.* Poultry contains a large amount of protein which will be toughened by high temperatures. This is true for all kinds of poultry and for birds of all ages.

Roasting a chicken in a hot oven results in shrinkage and losses of juice and flavor. Frying young chicken in very hot grease toughens and hardens the fibers. Boiling, instead of simmering, will not make the tough old hen tender and juicy.

The second general rule to remember is that of cooking according to the age and fatness of the bird. For young, tender, and well-fatted birds,

BUYING-COOKING GUIDE FOR CHICKENS ¹

Correct selection is the first step to delicious chicken.
The use to which it is put and the style of service determine the
kind of bird to be purchased.

MARKET TERM APPROXIMATE SIZE—SEX	CHARACTERISTICS	QUANTITY TO BUY PER PERSON	METHOD OF COOKING
<i>Chicken—under 1 year old—tender meat</i>			
Broiler 1 to 2½ lbs. (8 to 12 weeks old)	Smooth, thin skin; tender muscles with very thin connective tissue; small amount of fat under skin over the back; flexible tipped breastbone.	¼ to ½ bird	Broiling Roasting Frying
Fryer 2½ to 3½ lbs. (14 to 20 weeks old)	Same as above except size and age, meaty enough to be disjointed and cut into serving pieces; noticeable layering (finish) of fat underneath the skin.	¾ to 1 lb.	Frying Roasting
Roaster Over 3½ lbs. (male) (5 to 9 months old)	Tender, soft-meated muscles; smooth skin; large enough in size and meaty enough to be roasted whole; excellent layering of fat underneath skin; flexible tipped breastbone; connective tissue only slightly more developed than in fryer but still thin.	½ to ¾ lb.	Roasting Frying
Capon 4 lbs. and over (unsexed male) (7 to 10 months old)	The deluxe in finish, flavor, and tenderness brought about by ca- ponizing; popular size 6 to 7 lbs.; full-breasted, yielding a high pro- portion of white meat.	½ to ¾ lb.	Roasting
Pullet 2½ to 5½ lbs. (young hen) (4 to 9 months old)	Similar to roaster except body is shorter and plumper; flexible tipped breastbone; smaller weights often marked as fryers.	½ to ¾ lb., de- pending on method of cooking	Frying Roasting

Fowl—1 year old and over—less tender meat

Fowl Female any weight and age over 1 year	Thick, coarse skin; muscles well de- veloped with thick connective tis- sue; high proportion of fat under- neath skin; breastbone no longer flexible.	¼ to ¾ lb.	Braising Stewing Soup-making
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¹ Poultry and Egg National Board, Consumer Information Service.

Plan a buffet supper which includes, besides the chicken, a hot bread, a salad, a beverage, and a dessert. The chicken may be creamed, à la king, scalloped with rice, or chicken pie.

1. This is a demonstration project in which one group assists the teacher. The first part of the preparation consists of simmering the fowl. Study the recipes on the following pages and plan your procedure.
2. The second part of the project includes preparing the chicken dish and the other foods. Each group should be responsible for one part of the supper.
3. Serve the supper in buffet style. Take mental notes as you help yourself and eat your supper, so that you can offer suggestions for improvement.

broiling, frying, and roasting are good methods. For fairly young birds not well-fatted, braising in a covered roaster or casserole is advisable. For chickens over a year old, simmering for a long time is most desirable. Notice that dry-heat cookery is best for the tender birds, and moist-heat cookery is best for the less-tender fowl.

STEWED CHICKEN

1 stewing chicken, whole or cut into pieces	boiling water to cover 1¼ t. salt
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SINGE chicken over a low flame; remove pin feathers and oil sac; draw if necessary, and wash well.

COVER with boiling water and simmer 2½ to 4 hours, or until tender, turning a whole chicken several times to insure uniform doneness.

ADD $1\frac{1}{4}$ t. salt when chicken is about $\frac{3}{4}$ done.

POUR off some of the chicken broth and save for soup.

MIX 4 T. flour with $\frac{1}{2}$ c. cooled broth and cook until thick, stirring constantly.

ARRANGE chicken in serving dish and pour gravy over top.

NOTES: Dumplings may be cooked in slightly thickened gravy and served with the chicken.

A Sunday Dinner: stewed chicken, mashed potatoes (page 70), buttered peas and carrots (page 280), cole slaw (page 29), and apple pie (page 253).

CHICKEN À LA KING

SERVES 4-6

1½ c. diced cooked chicken	1 c. milk
1 c. sliced mushrooms	2 egg yolks
1 t. grated onion	½ t. salt
1 small pimento, cut in ¼-inch strips	⅛ t. paprika
1 c. chicken stock	⅛ t. pepper
3 T. chicken fat, butter, or fortified margarine	3 T. flour

PLACE	3 T. flour, ½ t. salt, and ⅛ t. pepper in the top of the double boiler. Mix with ½ c. milk and 1 c. chicken stock; cook over direct heat until thick.
BEAT	2 egg yolks; add ½ c. milk; add both to the above mixture; place over hot water; cook for 3 minutes and remove from heat.
WASH	mushrooms; slice and steam for 3 minutes in a skillet. Add 1 t. onion and sauté in 3 T. chicken fat for 5 minutes.
COMBINE	1½ c. chicken, 1 pimento, ⅛ t. paprika, mushrooms, and sauce.
HEAT	over hot water for 10 minutes.
SERVE	on toast or in patty shells; garnish with paprika and parsley.
NOTE:	Creamed chicken is made the same way, omitting mushrooms, pimentos, and egg yolks and adding 1 T. more flour to the above recipe.

PAN-FRIED CHICKEN

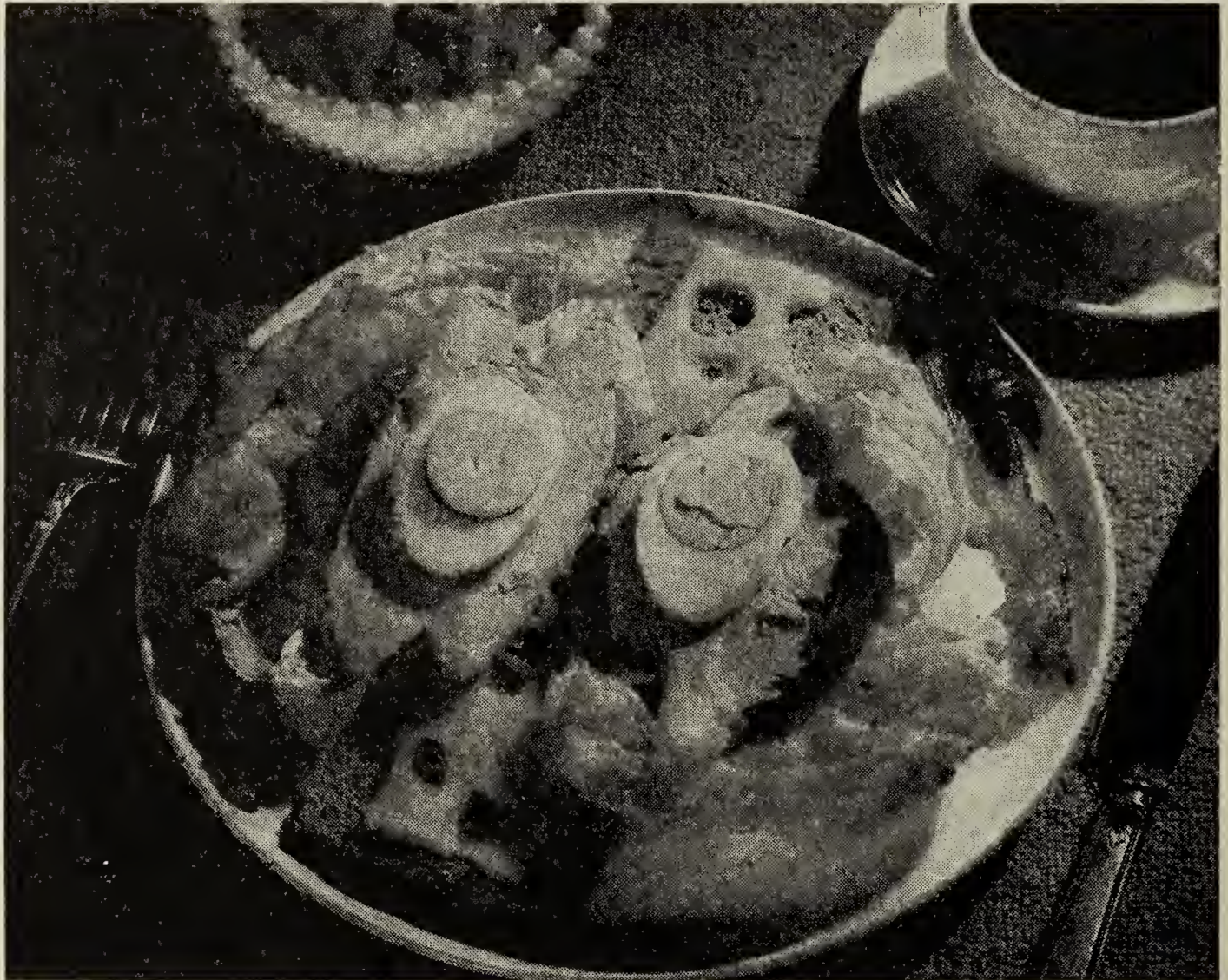
SERVES 4-6

3 to 3½ lb. chicken	1 t. salt
4 T. bacon drippings	¼ t. pepper
3 T. flour	1½ c. milk

SINGE	chicken over a low flame.
REMOVE	pin feathers and oil sac; draw if necessary, and wash well.
DISJOINT	chicken into serving pieces. Wash and drain. Place on clean paper toweling to dry.
SIMMER	giblets, with the exception of liver, for 1 to 1½ hours, or until tender. Add liver the last 20 minutes of cooking time.
HEAT	4 T. bacon drippings in a heavy skillet. Roll chicken in flour and brown on all sides, doing the heaviest pieces first; season with 1 t. salt and ¼ t. pepper.
COVER	and cook slowly 50 to 60 minutes or until tender.
TO PREPARE	gravy, remove chicken from skillet when done. Blend 2 T. of dripping, browned bits in frying pan, 3 T. flour, and 1½ c. milk.

COOK slowly, stirring constantly until thick.
NOTE: A guest dinner: pan-fried chicken, mashed potatoes (page 70), buttered celery and peas (page 280), and tomato aspic and cottage cheese salad (page 29).

LUCKY SEVEN SANDWICH



Poultry and Egg National Board

SERVES 4

8 slices cold sliced chicken or turkey	8 slices broiled bacon
4 slices buttered whole-wheat, rye, or enriched white bread, $\frac{1}{4}$ inch thick, cut in half	2 hard-cooked eggs
	2 tomatoes
	8 medium-sized pieces of lettuce
	8 slices of Swiss cheese, cut thin

COOK 2 eggs as directed for hard-cooked eggs (page 306) and cool.
SET butter out to soften. Wash and dry 8 pieces of lettuce and chill.
CUT 8 pieces of chicken and cheese.
SPREAD 4 slices of bread, and cut diagonally.
BROIL 8 pieces of bacon and place on clean absorbent paper.
ARRANGE in this order on individual plates: (1) 2 half slices of bread end to end, (2) slice of cheese on each half, (3) 2 pieces of lettuce half-

covering cheese, (4) 2 slices of tomato on lettuce, (5) slice of chicken on each tomato, (6) slice of hard-cooked egg, cut lengthwise, on chicken, (7) 2 pieces of broiled bacon on either side of plate.

SERVE with mayonnaise or salad dressing and some kind of relish.

NOTE: A Lucky Seven Sandwich with a beverage and fruit makes a perfect lunch or Sunday night supper.

CHICKEN PAPRIKA

SERVES 6-8

3 to 4 lbs. chicken	$\frac{1}{4}$ t. pepper
3 medium onions sliced	1 t. paprika
$3\frac{1}{2}$ T. bacon drippings	$\frac{1}{2}$ c. water
$1\frac{1}{4}$ t. salt	3 T. flour
1 c. sour cream	

SINGE chicken over a low flame; remove pin feathers and oil sac; wash well, and cut into serving-sized pieces.

COOK 3 onions in $3\frac{1}{2}$ T. bacon drippings until a light yellow color. Add 1 t. paprika and $\frac{1}{2}$ c. water; mix.

PLACE chicken on onions. Cover tightly and simmer for 2 to 3 hours, or until tender.

REMOVE chicken. Mix 3 T. flour with 1 c. cream and add to onions. Stir and cook until thick.

RETURN chicken to skillet; simmer until hot and serve with steamed rice (page 147).

NOTE: Sliced stuffed olives may be added if desired.

CHICKEN OR TURKEY SOUP

SERVES 4-6

carcass of chicken or turkey	2 T. parsley, chopped
8 c. water	$1\frac{1}{2}$ t. salt
4 outside pieces of celery and leaves, chopped	$\frac{1}{2}$ c. uncooked rice, washed

BREAK carcass of chicken or turkey into pieces; place in a kettle; add 8 c. water and simmer for 1 hour. Strain; pick pieces of chicken from carcass and put back into soup.

WASH $\frac{1}{2}$ c. rice and add 4 chopped pieces of celery and $\frac{1}{2}$ t. salt; cook for 35 minutes. Add 2 T. parsley and serve at once.

CLASS ACTIVITIES

1. What style of chicken recipe do you like best? Broiled? Fried? Roast? Creamed? Scalloped? Compare preferences. What style is preferred by most of the members of the class? (See Unit Eleven for roast chicken.)

2. Plan a chicken dinner menu. Try to combine foods which are pleasing in flavor, pleasing in appearance, and make a well-balanced meal.

3. What types of poultry are available in your markets? Fresh, fresh-chilled, and quick-frozen? Government-graded? Compare prices for different types.

FUN WITH FOOD AT HOME

1. Prepare chicken salad for party refreshments.

2. Make three-decker chicken and egg salad sandwiches for an informal party.

3. Use leftover chicken or turkey in a dish which is new to your family.

4. Add two recipes for the use of leftover chicken or turkey to the protein section of your personal recipe book.

A SUMMARY OF YOUR STUDY OF THE PROTEIN FOODS

Your study of this unit should have given you certain knowledge about the protein foods and certain skills in preparing them. Can you make a one-minute talk on each of the topics listed below?

Basic cookery procedures

Principles of protein cookery

Dry-heat methods for tender cuts

Moist-heat methods for less-tender cuts

Fish cookery

Poultry cookery

Egg cookery

Selection and care

Characteristics of good eggs

Government-graded eggs

Appearance of good-quality meat

Government inspection services for meat

Government-graded meat

The tender and the less-tender cuts

Appearance of good-quality fish

Fresh and frozen fish

Appearance of good-quality chicken

Age of chicken and method of cooking

Government-graded chicken

Importance of low temperatures in storage of protein foods

Use of frozen fish and poultry

Skills in food preparation

Soft-cooked and hard-cooked eggs

Poached or fried eggs

Omelet or scrambled eggs

Hamburger patties or meat loaf

Stew

Broiled chops or steak

Creamed or scalloped fish

Creamed or scalloped chicken

Nutrition facts

Protein needs of the body

Complete protein foods

Minerals and vitamins in the protein foods

Iodine in ocean fish

Tough and tender cuts equally nutritious

Concentrated food values in variety cuts

WHAT DO YOU KNOW ABOUT THE PROTEIN FOODS?

The following tests will help you to check up on your understanding of the selection, care, preparation, and food values of the protein group of foods.

To test your knowledge of nutrition

Some of the following statements are true and some are false. On a separate sheet of paper write the number of each statement and the word "true" or "false" after it. **Do not write in this book.**

1. Fresh-water fish and iodized salt are the best sources of iodine.
2. Food values in poultry are similar to those in meat.
3. Most meats are a good source of iron but a poor source of calcium.
4. Pork is especially rich in thiamin.
5. Eggs furnish the body with fuel, repair service, and general insurance.
6. All protein taken into the body is fattening.
7. Foods containing complete proteins are not essential after the growing period.
8. A large percentage of our own bodies is protein.
9. Concentrated food values are present in liver and other glandular meats.
10. Eggs, fish, meat, poultry, soybeans, and peanut butter contain complete proteins.

To check your choice of foods

On a separate sheet of paper write the number of each question, and opposite the number write the letter *a* or *b* to indicate the correct answer. **Do not write in this book.**

1. Which of the following breakfasts will you choose to obtain a supply of complete proteins?

(a)

Grapefruit
Scrambled Eggs and Bacon
Whole-wheat Toast, Buttered
Oatmeal and Cream
Cocoa

(b)

Orange Juice
Hot Cakes with Maple Sirup
Muffins and Jam
Coffee

2. Which of the following lunches will you choose at the school cafeteria for complete proteins?

(a)

Spaghetti
Apple and Celery Salad
Chocolate Cake

(b)

Peanut Butter Sandwiches
Tomato Salad
Ice Cream
Chocolate Milk

To test your understanding of protein cookery

Select the best answer in each of the following cases. On a separate sheet of paper write the number of each problem, and opposite the number write the correct answer. **Do not write in this book.**

1. Which of the following is the best buy when one wishes to have broiled meat for dinner?

veal loin chops pork rib chops lamb loin chops round steak

2. The most economical buy for stew is

T-bone steak chuck sirloin rib roast

3. Tender cuts should be roasted at

500° F. 400° F. 300° F. 200° F.

4. Pot roast is cooked by the process of

simmering boiling broiling deep-fat frying

5. Which of the following is not used for cooking eggs?

broiling pan-frying simmering creaming

To test your understanding of guides to quality

The following descriptive phrases indicate either good or poor quality. On a separate sheet of paper write the number of each descriptive phrase and the words "poor quality" or "good quality" after it. **Do not write in this book.**

1. Well-fatted chicken

4. Chicken with yellowish-white skin

2. Egg which spreads out well when broken into a saucer

5. Fish quick-frozen soon after catch

6. Beef well-marbled

3. Beef labeled U. S. Commercial

7. Meat labeled U. S. Choice

REFERENCES FOR FURTHER READING

Callahan, Genevieve, *The California Cookbook*. M. Barrows and Company, 1946. Pp. 65-146

Davis, Adelle, *Vitality Through Planned Nutrition*. The Macmillan Company, 1942. Pp. 64-72

Harris, J. W., and Speer, E. L., *Everyday Foods*. Houghton Mifflin Company, 1946 and 1941. Pp. 90-95, 260-280.

Silver, Fern, *Foods and Nutrition*. D. Appleton-Century Company, Inc., 1941. Pp. 219-223, 337-367.

Mosser, Marjorie, *Good Maine Food*. Doubleday, Doran and Company, Inc., 1940. Pp. 105-138, 203-210.

Wall, Roy, *Fish and Game Cookery*. M. S. Mill Company, Inc. 1945.

Sources for pamphlets, charts, and other materials

American Meat Institute. E. Van Buren Street, Chicago, Illinois.

National Live Stock and Meat Board. 407 S. Dearborn St., Chicago, Ill.

Poultry and Egg National Board. 308 W. Washington St., Chicago, Ill.

8

Your Everyday Meals

Good food three times a day is tremendously important for healthful and happy living. This means much more than plenty of good-tasting food which satisfies the appetite. Of prime importance in the day's rations are the nutrients essential for our body needs. Good meals provide an adequate diet, and, at the same time, are good to eat, hunger-satisfying, attractive to the eye, well cooked, and nicely served.

In this unit of study we shall have more experience in planning, preparing, and serving whole meals. Good breakfasts, lunches, and dinners do not happen by accident. They must be planned intelligently; the food must be wisely selected; the dishes must be prepared correctly and served attractively. The preceding units have already given us considerable experience in each of these phases of food study, and will serve as a foundation for our study of everyday meals.

Each of us should continue to practice good eating habits. Whether you are selecting your own food from a cafeteria counter or planning family meals, the problem remains the same. Since there are a great many foods with varying food values, the problem of selecting an adequate daily diet may seem extremely complicated, requiring constant checking with a table of nutritive values. For practical purposes there is a simple, short-cut method which is helpful in planning well-balanced breakfasts, lunches, and dinners. Each of the first seven units of study has dealt with a basic group of foods, and nutritionists have recommended minimum amounts that should be eaten daily from each group. Use of the Basic 7 Food Groups will make it easy for you to get all the essential nutrients in each day's meals. Whether you are eating at home, at a public eating place, or at a party remember the Basic 7. Every day!

1. Food for the day: the balanced way

Do you eat right? Does your food satisfy your body needs or only your appetite? Learn to check your meals for nutritional requirements and to plan every day for an adequate diet.

The balanced diet: what you eat and what you need. Nature provides us with an appetite for food. Without food, we feel hunger pangs and instinctively seek it to relieve our distress. Nature has given us a desire for food in order to guarantee a supply of food for the body. If we never felt hungry, we might forget to give our bodies the food which they need for life itself.

In our preceding study, we have learned that certain essential nutrients are necessary for health and vigor. The body needs include proteins, fats, carbohydrates, minerals, water, and vitamins; and these can be supplied only by an adequate intake of the same substances. The adequate diet furnishes all the nutrients required by the body. When the intake of these materials is equal to the need for them, the diet is well balanced.

Unfortunately, nature did not provide us with an automatic appetite for the right kind of food or the right amount. Some people eat too much and some too little. A great many people do not eat the right kind of food. Everyone should take pains to form good habits of eating. A well-balanced diet is possible for anyone who is willing to learn about his or her own food requirements. Remember that this need not mean dull, uninteresting meals. A Basic 7 meal can be ace-high in both taste and eye appeal.

The seven basic food groups: a guide to good eating. Accurate measurements of nutrients is a highly complicated matter and not practical for everyday use. Very few people have the time or wish to weigh their carbohydrates, fats, proteins, and minerals in grams or to figure out their vitamins in terms of International Units. Such a procedure before every meal would be impossible for the average person and would certainly destroy pleasant anticipation of a good meal. Accurate balancing of the diet between body requirements and food intake is the business of the research nutritionist and the hospital dietician. For everyday purposes we need a simpler procedure, a quick and easy way of selecting the right foods for an adequate diet.

The following rules should be your guide to good eating. The groups are not listed in the same order as taken up in the preceding units, but otherwise do not differ.



Kellogg Company

Can you name the food groups included in this menu: cheese and bean loaf with tomato sauce, parsley buttered potatoes, celery garnish, and buttered carrots?

1. *Leafy, green, and yellow vegetables.* Eat one or more servings daily.

2. *Citrus fruits, tomatoes, and other vitamin C foods.* Eat one or more servings daily.

3. *Potatoes and other vegetables and fruit.* Eat two or more servings daily.

4. *Milk, cheese, and ice cream.* If you are teen-age or younger, drink 3 to 4 glasses of milk daily. Adults should have 2 or more glasses daily. In place of one glass of milk, you may eat 1 ounce of cheddar cheese, 4 ounces of cream-type cheese, 12 ounces of cottage cheese, or 2-3 dips of ice cream.

5. *Meat, eggs, poultry, fish, dried legumes, and nuts.* Eat four or more eggs every week; eat one serving daily of meat, fish, or poultry; eat two or more servings per week of dried beans or peas, peanut butter or nuts.

6. *Bread and other cereal foods.* Eat bread at every meal and another cereal food once or twice a day. Remember that whole-grain or enriched cereal foods are most nutritious.

CLASS PROJECT: PLAN YOUR FAMILY MEALS FOR ONE WEEK.

This is a project which you will work out on paper.

1. Using the seven basic food groups as a guide, plan breakfast, lunch, and dinner menus for your family for one week.

2. Plan meals which are good to eat as well as adequate.

3. Plan meals which will provide for the special needs of each member of the family, including active, moderately active, and sedentary people and young children, teen-agers, and older people.

4. Plan each meal on the basis of a whole day's meals.

5. If any members of the family carry lunches to school or to work, plan these lunches also.

6. When the plans are finished, exchange them with someone else in the class and check the menus according to the points given on pages 369 and 370.

7. *Butter and fortified margarine.* Eat some daily for vitamin A content. Other fats and oils are valuable for energy.

Using the guide to good eating. The seven basic food groups serve as a guide in planning the daily meals, but not as an exact pattern. Since many foods are included in each group, it is possible to plan varied menus and to please the appetites of persons with special preferences. In using this guide to good eating, the following points should be kept in mind.

1. Plan menus in terms of a whole day's diet. It is not necessary to include each of the food groups in each meal; but all groups should be included in the food for the day.

2. Do not count the same food as a representative of two different groups. Although some foods, such as greens, belong to two different groups, they should not be counted twice in planning a well-balanced diet.

3. The seven basic food groups should be used as a guide for the selection of food at a cafeteria or restaurant as well as for meals at home. Lunchbox meals should also be included in the plan for a balanced diet.

4. This plan for good eating builds health and normal bodies, but anyone with digestive or other illnesses should ask a doctor's advice in planning a special diet.

In addition to the basic seven. Besides the foods included in the basic groups, there are other substances which should be taken into account.

Water is as important as any nutrient. About three-fourths of the body weight is water. People may live for a long time without food, but only a few days without water. Water is the agent in your body which



Langley High School, Pittsburgh Public Schools

Preliminary planning is essential for the delicious and well-balanced meal either at home or at school.

carries nutrients to the cells and by which wastes are removed. Blood and all the digestive juices are largely water.

Not all water taken into the body is drunk as water. Many foods contain a large percentage of it. Milk, fruit juices, soups, fruits, vegetables, and ice cream are largely water. Thus, the body receives a considerable amount in food which is eaten. The average person needs 2 or 3 quarts of liquid daily. Solid foods generally supply about 3 cups of water. Milk and other beverages supply several cups, depending upon the amount which is taken.

While water is tremendously important to the body, it should not be taken in excessive amounts. Minerals and vitamins soluble in water are washed out of the tissues and needlessly lost when excessive amounts are taken. An adequate intake of liquids is extremely important, but, on the other hand, too much is not desirable.

Sugar, quite the opposite of water, is not essential to the body. It is a carbohydrate and, therefore, an energy food, but it contains no other nutrient. It is also irritating to stomach tissues, especially when taken in excessive amounts.

Even though you do not eat sugar as a separate food, that is, on your breakfast cereal or as candy, you are sure to eat it in considerable amounts. It occurs in natural foods, such as fruits, vegetables, and cereals, and in prepared foods, such as candy, cakes, and milk desserts. Nutritionists recommend that we eat sweets in moderation, using enough to make the diet palatable, but not enough to spoil the appetite for other foods. Among the sweets are candy, sirups, jams, jellies, and honey.

Breakfast, lunch, and dinner for one day. The menus given below show how the seven basic foods can be included in a day's food. These meals can be varied in many ways and yet contain all the basic foods.

Breakfast
 Orange juice
 Corn Flakes with Milk
 Soft-cooked Egg
 Two Slices of Toast
 Butter or Fortified
 Margarine
 Cocoa

Lunch or supper
 Vegetable Soup
 Roll and Butter
 or Fortified Margarine
 Green Salad
 Apple Pie
 Milk

Dinner
 Lamb Chops
 Baked Potatoes
 Green Beans
 Banana Salad
 Whole-wheat Bread
 Butter or Margarine
 Ice Cream
 Milk

CLASS ACTIVITIES

1. Check up on your own food for a balanced diet. On a separate sheet of paper, make a chart like the one below. Each day, write down in the ap-

FOOD GROUP	MON- DAY	TUES- DAY	WEDNES- DAY	THURS- DAY	FRI- DAY	SATUR- DAY	SUN- DAY
Green and yellow vegetables							
Vitamin C foods							
Potatoes and other vegetables and fruits							
Milk, cheese, and ice cream							
Meat, poultry, fish, eggs, dried legumes, etc.							
Bread and other cereal foods							
Butter or fortified margarine							

appropriate spaces the names of the foods you have eaten. **Do not write in this book.** After you have completed your record, report on your findings. Is your daily diet well balanced? Can you improve it?

2. Estimate the amount of water which you receive in beverages and in foods every day. Count your solid food as supplying about 3 cups and your liquid foods as supplying about 90 per cent of their volume. Do you get enough water daily? Too much?

3. Report any change in your own food habits because of your study of the seven basic food groups.

FUN WITH FOOD AT HOME

Ask your mother if you may plan the family meals for a week. Perhaps you can make use of the menus which you planned as a class project.

2. The pattern of your meals

Every meal should help to supply a balanced diet, but this does not mean that every breakfast, lunch, and dinner must be planned according to the same pattern. There is opportunity for a wide variety of menus and many different types of meals. Personal preferences, age, sex, activity, and season of the year all play a part in planning healthful and attractive meals.

Points to remember in menu-planning. No question among the homemaker's many problems comes up more often than "What shall we have for dinner?" The right answer involves much more than merely thinking up something new and different or falling back on a favorite dish. As we have already learned, good dinners contribute to an adequate diet for the day. However, there are several other points to consider in planning the menus for dinner and other meals.

1. Foods which build a balanced diet.
2. Foods which combine well in flavor.
3. Meals which are attractive in appearance.
4. The type of meal, such as the sandwich lunch or the one-dish dinner. Time-saving in meal preparation is often important.
5. Meals which provide the right kind and amount of food for each member of the family.
6. The cost of the meal.

All these points should be considered in planning the family meals, and applied also to the selection of food for a box lunch or for the cafeteria meal. In the following paragraphs we will discuss each of these points more fully, with the exception of the balanced diet, which was studied in the last problem.

Some foods go together. The right combinations of food for flavor and eating quality are important in good meals. The menu should always include dishes which have contrasting flavors and textures. Many of these combinations we take for granted, without realizing how one food sets off another. A crispy cracker with cream tomato soup is a good combination because of the pleasant contrast of texture and flavor. Other pleasing combinations are: a hard roll with creamed or scalloped dishes; a crisp, cold green salad with broiled or roasted meat.

Avoid monotonous and uninteresting combinations, such as creamed eggs, mashed potatoes, and mashed white turnips on the same plate; or spaghetti, peanut butter sandwiches, and cake for supper. Try to combine bland flavors with tangy or sharp flavors. This is why spaghetti and tomato sauce are good together. Highly seasoned and unseasoned foods also combine well. For example, well-seasoned sausages are good with waffles, and fruit cookies are good with custard. Sweet and sour combinations are also pleasing. Sweet fruit salads, such as banana, pear, and peach, are good with French dressing. Often, a tart sauce adds appetite-appeal to another food, as tartare sauce on fish or tomato sauce on breaded veal.

There are many types of good flavor contrasts, and you will try always to choose foods that taste good together. When you are packing a school lunch, try to put in something which will "pep up" your sandwiches. Even relish and lettuce in your ham sandwiches add pleasing variety. A tart apple or an orange makes the sandwiches taste better. If you are choosing foods at the cafeteria counter, think how they will taste when eaten together. A tray with macaroni, ice cream, and cocoa milk does not offer much taste-appeal.

Plan meals for color and texture. Would you rather eat a dinner of broiled halibut, scalloped potatoes, creamed cauliflower, and apple and celery salad, served on white plates; or would you rather eat one which consists of broiled halibut, buttered green peas, parsley potatoes, and a salad of greens, tomatoes, radishes, and celery, served on old-fashioned blue-and-white willowware plates? If you can imagine the difference in color effect, you will certainly choose the latter. No matter how good a food may be, it will taste better if served in attractive combinations.

Even the simplest meal can be improved by giving it eye-appeal. Sometimes a very little garnish will lift an ordinary dish from dullness to one with dramatic appeal. Paprika sprinkled on creamed eggs or cole slaw gives a dash of excitement. Water cress or red radishes on a colorless salad plate, or a sprig of parsley on the dinner plate, adds dash and spirit.

The choice of china is important for color effect in serving meals. White china is probably the least helpful in securing pleasing combinations. Modern china styles are especially colorful, and people who are color-conscious about their food like the strong, clear greens, blues, and yellows in their dishes. Remember that the plates, cups, and saucers are the background of your meal, and choose accordingly.

The homemaker who serves good meals must be not only a wise shopper, a good cook, and an intelligent dietician, but she must be an artist as well. She will think of every dish as a picture which she is creating. Working with foods, china, and other accessories, she can make her meals as good to look at as they are to taste, if she is willing to take a little trouble to give them eye-appeal. Of course, if you are a person who considers mealtime only an occasion for stoking yourself with fuel, then you will not care about its beauty. But there is little danger that anyone who has once seen food at its best will not appreciate it.

The type of meal. Everyday meals can be made more interesting and their preparation more speedy if the homemaker-dietician realizes the possibilities for different types of meals. There are several different types of meal patterns which may be adapted to suit the occasion.

A very light breakfast may include only orange juice, toast, and milk. A light breakfast may include more pieces of toast and two glasses of milk. A medium-heavy breakfast will probably include a cereal or an egg in addition to these foods. A heavy breakfast may include bacon, sausage, or ham with the eggs and may have a stewed dried fruit instead of orange juice, a hot bread instead of the toast, and cooked cereal instead of a ready-to-eat breakfast food.

Luncheons are more varied in type than breakfasts. The main dish may be a sandwich, a salad, a soup, or a cooked dish such as a soufflé, a scalloped dish, a creamed vegetable or meat, or waffles. In each case, an accompaniment and a beverage should be chosen for variety in taste and additional food values.

Dinner menus also vary in the number of dishes and courses. A simple dinner may be a one-dish meal such as casserole or stew. Usually, a salad, bread, and a beverage accompany the main dish. In contrast to

CLASS PROJECT: PACKING AND EATING BOX LUNCHES.

Plan a box lunch, pack it at home, and bring it to class for a picnic party.

1. Watch a demonstration of packing a good box lunch.
 2. Discuss menus for box lunches which are well balanced. What are the special foods available at the present season?
 3. Make your own individual plan for your box lunch. Pack it at home and bring it to class for your picnic party.
 4. Set out your lunches ready to eat, and hold a five-minute inspection. Each lunch should have a written menu beside it so that everyone can tell exactly what foods are used for sandwich fillings, in containers, etc.
 5. Eat your lunches, remembering that good food deserves good manners.
 6. Discuss the lunches for the following points: balanced diet, attractiveness, and packing.
-

this simple dinner, some people prefer a dinner of three courses: (1) soup; (2) a main course including meat, two vegetables, a salad, and bread; (3) a dessert and a beverage. An average dinner generally includes a meat dish, a vegetable, a salad, a beverage, and a dessert. There is considerable variation in types of dinner menus, but any of them can be planned to provide an adequate meal. A one-dish dinner may contain as many nutrients as one with several separate foods. Compare the following dinners for food values. If one ate large servings of the few foods in Dinner No. 2 would he receive the same nutritive values?

Dinner No. 1

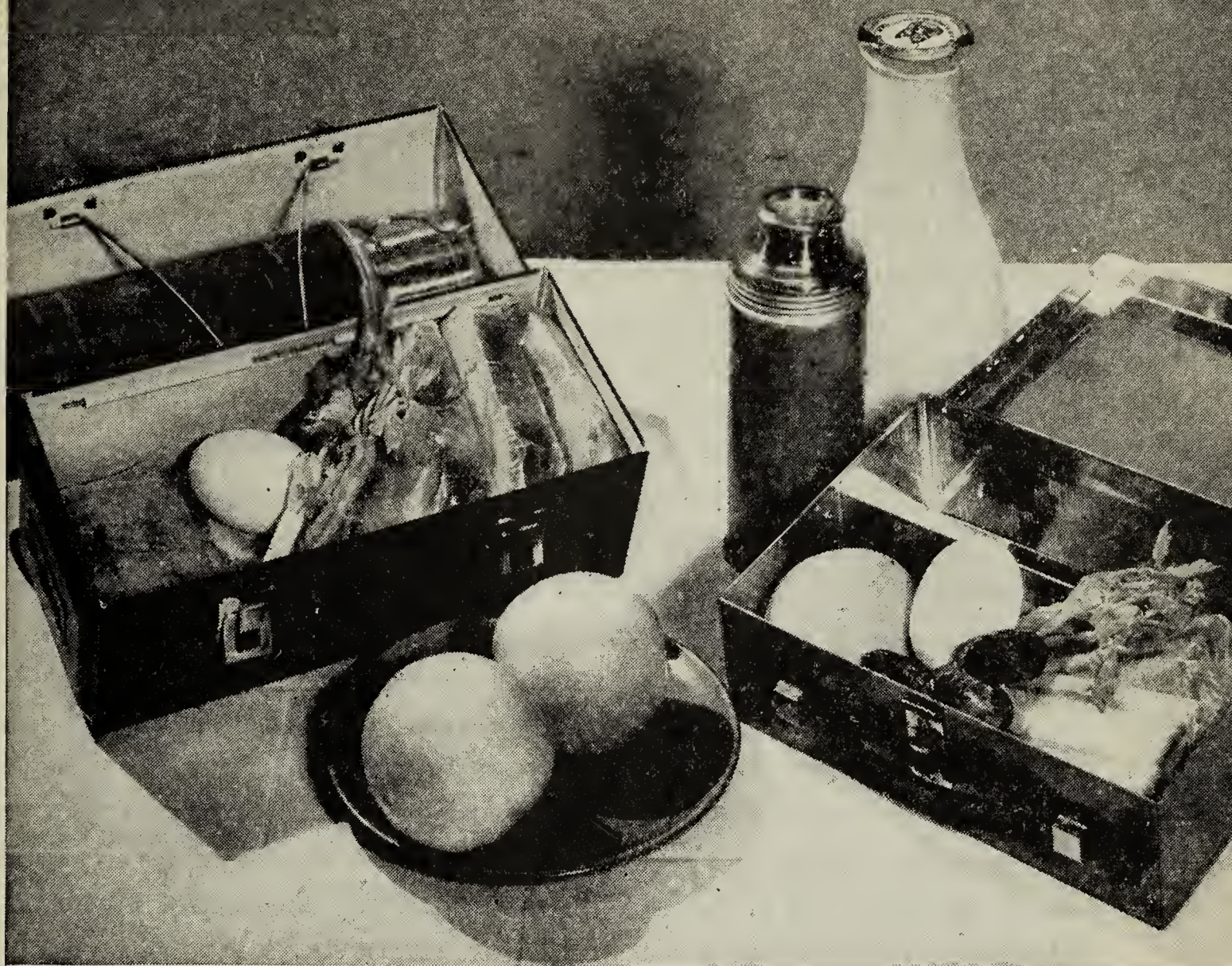
Chicken Soup
Roast Beef with Mashed Potatoes
Buttered Carrots Spinach
Head Lettuce with French Dressing
Hot Rolls Butter
Ice Cream Cookies
Milk

Dinner No. 2

Beef Stew with
Carrots, Peas, and Potatoes
Cole Slaw
Hot Rolls Butter
Ice Cream Cookies
Milk

Lunchbox meals. If you eat some of your meals from a lunchbox, you have a special problem in menu-planning. Many foods can not be packed successfully, but there are many which are well adapted to the lunchbox.

Sandwiches generally form the main part of the lunchbox meal. People who eat them everyday sometimes complain that they are tired of sandwich meals. However, considerable variety can be obtained by using different sandwich fillings. See the suggestions on page 502. Dif-



Sunkist Photo

A well-planned box lunch includes a juicy fruit or a succulent vegetable for pleasing variety with sandwiches, and provides some method such as a vacuum bottle for keeping the milk cold.

ferent kinds of bread—white, whole-wheat, oatmeal, rye, fruit, and nut—also help to give variety to the lunchbox menu.

Fruits and raw vegetables provide a pleasant contrast in flavors. Juicy or succulent food is good with lunchbox sandwiches. This is a case where the flavor and texture of each food enhances the other. Apples, oranges, raw carrot sticks or wedges, celery, and bananas are among the possibilities for the packed lunch.

Eggs are well adapted for lunchboxes. They may be hard-cooked, chopped, and mixed with salad dressing for sandwich filling; hard-cooked and eaten with salt; or deviled and the halves put together with toothpicks and wrapped in waxed paper.

Sweets are always welcomed by those who carry lunchboxes. Cookies, cake, and, sometimes, candies are good selections. Cookies are especially adapted for box lunches. They are easily wrapped and easy to eat. Those who eat from lunchboxes generally prefer the foods which are easily eaten without fork or spoon.

Foods in containers can make a box lunch more interesting. Baked custard, as shown in the illustration on page 179, can be packed and carried without difficulty. A small glass jar with a screw top and a wide mouth makes it possible to carry such foods as canned peaches or strawberries, potato salad or soft custard pudding.

Milk, as a beverage or in cream soup, should form part of the box lunch. Many schools provide milk which can be purchased at lunchtime. If this is not available, the milk should be carried in a thermos bottle. Many lunchboxes are made with a space in the lid for holding the thermos. We have already learned about the importance of keeping milk cold, and milk in the box lunch is no exception to the rule. A thermos bottle can also be used for hot soups.

The box lunch and the seven basic food groups. Can you see how it is possible to include most of the basic food groups in one box lunch? Or all of them? Of course, it is not necessary that all of them be included in the lunch box, because those which are omitted can be included in your other meals. However, it is surprisingly easy to plan the box lunch in terms of the basic foods. Name the basic food groups which are included in this box lunch: sandwiches of peanut butter and jelly on buttered whole-wheat bread, raw carrot sticks, a tangerine, a banana, and milk.

Hints on packing the lunchbox. 1. Good box lunches require planning ahead. The morning hour when the lunches are packed does not permit the preparation of food requiring much time. All foods should be ready for packing. Some foods, such as sandwich fillings, fruits, and desserts, can be made ready the night before.

2. Each food should be wrapped separately in waxed paper to prevent flavors and odors from penetrating other foods and to keep some foods crisp.

3. Strict cleanliness should be observed. Metal lunchboxes and thermos bottles should be washed with hot, soapy water, thoroughly rinsed with boiling water, and aired. Lunchboxes should be sunned frequently to keep them sweet.

4. Care should be taken in placing the food in the box to put the heavy things at the bottom. Sandwiches, cake, and similar foods should not be squeezed in so that they are crushed out of shape.

5. Two paper napkins are advisable, one for use as a napkin and the other as a doily or place mat.

Choosing your lunch at the school cafeteria. If you buy your lunch at the school cafeteria, your problem is entirely one of selection. Here

again, the seven basic food groups are your guide to good eating. Perhaps it will require some practice before you can walk along the counter and choose foods which will add up to a balanced meal. But you can become skillful at the selection of a good lunch. Do not allow the hurry and bustle of the lunchroom to confuse you.

Remember the following points at the cafeteria counter:

1. Try to choose a balanced lunch. You will have a better chance of getting one if you choose a variety of foods.
2. Know what type of lunch you want: a sandwich lunch, a salad lunch, a soup lunch, or a main-dish lunch.
3. Do not grab anything you see without stopping to think. On the other hand, do not hold up the line with your indecision. If possible, study the menu on the bulletin board, and make your decision while you are waiting in line.
4. Always include milk in your lunch.
5. Avoid more than one sweet.

It may be that you bring part of your lunch and buy the rest of it at the school cafeteria. In this case your problem of selection depends upon what you have in your lunchbox. You will not want to buy a food which is similar to that in your box. If you brought sandwiches, you will not wish to buy rolls. A hot dish, such as soup, scalloped vegetables, or stew, would be a good choice. If your lunch does not contain a fruit or raw vegetable, you will wisely choose a salad.

If the menu were as follows, what would you choose from the cafeteria counter on each day when you have brought egg salad sandwiches and an orange? What would you choose if you brought no food?

Monday

Split Pea Soup
Cheese Fondue
Tossed Vegetable Salad
Orange and Grapefruit Salad
Corn Meal Muffins
Ham Sandwiches on Rye
Chocolate Pudding
Apple Pie
Milk

Tuesday

Cream of Tomato Soup
Roast Lamb
Mashed Potatoes
Lima Beans
Apricot, Cheese, and Pineapple Salad
Berry Muffins
Whole-wheat Bread
Ice Cream
Milk

Amounts of food needed. In most families, some members require larger amounts of foods than others. Our earlier study (see the discussion on pages 100 to 103) pointed out the need of growing teen-agers for



Photograph by Frederic Lewis

This young lady has enjoyed many good, nutritious meals.

extra amounts of energy foods and building foods; it was pointed out, also, that active people need more calories than those who are sedentary. Obviously, babies and toddlers do not use up as much fuel as older people. It might seem that our need for food would increase in quantity from the time we are born until late in life, but this is far from true. It is true that our need does increase sharply from babyhood until the peak is reached during the growing period. An active, athletic boy or girl requires more food than at any other period throughout life. As the growing period is passed, the amount of food will decrease somewhat, depending upon the type of life lived by the individual. A

woman who engages in physical work or exercise requires more than one who works in an office or in some other white-collar occupation. Older people who have slowed down in their activities require still less food for energy, but we should not forget that they need protein for repair and replacement of tissues and minerals and vitamins for protection. No definite age can be determined as the age when people have reached this period of life, because some are "old" at sixty and others are not "old" until they are eighty or even older.

Check up again on the amount of food which you eat (see pages 102 and 103) and see if you are eating as much food as you should. It would not be practical to measure our food every day in terms of calories. However, an occasional check-up is a good idea because it will tell you whether you should try to eat more or less than is your usual habit.

The baby's meals are special! No discussion of everyday family meals is complete without mentioning the very young member. Milk, without question, is the chief article of diet, and if the baby is breast-fed, there need be no trouble or extra worry about formulas and bottles. If it happens that the mother's milk is not adequate, then it must be supplemented or replaced by other milk prepared by formula. Everyone who helps to take care of a baby should know how to sterilize the

DEMONSTRATION LESSON: STERILIZING EQUIPMENT AND PREPARING THE FORMULA.

Watch a demonstration of preparing a 24-hour supply of milk for a baby.

1. Observe the following processes: washing the bottles with hot, soapy water and brush; rinsing with hot water; sterilizing in boiling water; removal from water; sterilization of caps and nipples.

2. Observe the preparation of the formula. Use a formula that has been advised by a doctor. Observe the mixing of the formula, the filling of the bottles, and storing in the refrigerator.

3. List the ways in which care was taken to keep the baby's food clean and safe.

SAFETY WARNING: Never allow a toddler or young child to run about with a candy sucker in his mouth. Very serious accidents have occurred when children have fallen and have run the wooden stick into their mouths and throats. In one case, loss of speech resulted when the stick pierced the palate.

bottles, caps, and nipples and how to follow the directions for the formula.

Remember always that a baby is very susceptible to disease and that carelessness in handling his food or equipment may cause very serious results. The formula may be prepared from raw, pasteurized, canned, or powdered milk, but the strictest hygienic measures should be observed in handling it.

A whole day's rations should be prepared at one time, each bottle should be filled with the proper amount, and the bottles should be stored in the refrigerator ready for use.

During the first year, the baby's food should be prescribed by a doctor. Probably, he will recommend the following foods in addition to milk: orange or tomato juice, puréed vegetables and fruits, egg yolk, cooked cereal, cod-liver oil, and crisp toast, zwieback, or graham crackers.

Food for toddlers. Beginning with the second year, a greater variety of foods is added to the diet. Milk continues to rank as the Number One food, and the child's appetite for it should not be crowded out by other foods. If you know a toddler who refuses to drink his full quota of milk, you may find that he is allowed too many other foods and has no room left for milk. As the child grows older, he will require more foods and larger quantities. Soon we can check his diet according to the

basic seven food groups. Some desirable and undesirable foods for very young children are listed below.

Desirable

Milk, cream soups, milk desserts.

Mashed potatoes and other mild-flavored vegetables, well-cooked.

Citrus fruit juices and tomato juice. Orange sections for older children.

Cooked whole-grain cereals, toast, and crackers. Uncooked cereals for older children.

Butter or fortified margarine in small amounts.

Eggs, liver, and lean meat.

Green and yellow vegetables, both raw and cooked.

Undesirable

Fatty foods (except crisp bacon) and fried foods.

Highly seasoned foods, such as chile con carne, etc.

Candies, rich cakes, and heavy desserts.

Soft breads and hot or sugar rolls.

Meals for older people. Although a smaller amount of food is required by older people who are less active, the diet should include all the essential nutrients. Foods from each of the basic seven should be included in the daily diet. Particular care should be taken to include foods rich in the B complex because the diet of older people is almost always lacking in this respect. Lean meat, whole-grain cereal, milk and milk products, and green vegetables should be stressed. Plenty of sunshine or vitamin D or both should be included in the daily routine for oldsters.

A special problem which troubles many older people is the lack of teeth, which means that they can not enjoy hard foods. Instead of serving them raw vegetables such as celery and carrots or raw fruits such as apples, give them cooked vegetables and fruits or soft ones such as bananas and peaches; instead of hard rolls and sliced meat, give them soft rolls and chopped meat dishes.

Meals for those who are ill. Another problem with which the homemaker-dietician must deal from time to time is food for the sick. The doctor prescribes food for his patients just as he prescribes medicines, but we should know how to follow his directions intelligently and how to make the food attractive.

Diets for different kinds of sickness vary, but in many cases the doctor will order a soft diet, a liquid diet, or a light diet. These diets include



Langley High School, Pittsburgh Public Schools

Preparation of an attractive and appetizing sick-tray is sometimes part of the home-maker's routine.

many dishes which you have already learned to prepare. Notice that they include foods from several of the basic food groups.

Liquid diet

Fruit juices
Milk
Tomato juice
Ice cream and
milk sherbets
Raw eggs
Gruels prepared
with milk
Cream soups

Soft diet

All foods on the liquid
diet
Smooth whole-grain cere-
als served with butter,
cream, or sugar
Soft-cooked eggs
Custards, soufflés, junket
Mashed or baked potatoes
Puréed vegetables
Milk toast
Mashed or puréed soft
fruits
Gelatin

Light or convalescent diet

All foods on liquid
and soft diets
Lean meats, fish,
and poultry
Cottage cheese
Stewed fruits
Bread

Following are several general suggestions which are helpful in plan-
ning and serving food for the sick.

1. Prepare simple and easily digested foods. Some food experts say that no food should be given on the liquid and soft diets which could not be given to a baby.

2. Often, three meals and three mid-meals are advisable. In this case, the amount of food should be about the same at each feeding.

3. Avoid monotony in the diet for the sick. Plan a variety of dishes in order to intrigue the appetite.

4. If necessary, try disguising certain important foods which the patient does not like. If he objects to milk, make cream soups, custards, malted milks, and other milk drinks. Raw eggs can be disguised in frothy drinks, desserts, and gruels.

5. Avoid foods which are likely to cause trouble. Among these are fried foods, fatty foods, very sweet foods, and hard foods, such as nuts, cantaloupe, celery, and raw apples.

6. Make the sickroom tray as attractive as possible. Serve small portions of food and not too many kinds of food at one meal. Use your prettiest silver and linens and your most colorful china. A miniature bouquet, even a single flower, lends glamour to the invalid's meal.

7. For those who must eat many meals in bed, procure a tray with short legs which stands upon the bed or a table with a swinging arm which can be manipulated by the invalid.

Planning the family meals. The right food for special members of the family need not mean the preparation of extra dishes at each meal. For instance, teen-agers and very active people need larger amounts of protein, carbohydrates, and fat. This can be easily accomplished by giving them larger servings of meat, eggs, poultry, fish, hearty vegetables, and cereal foods. When young children and older people are among the family group, the homemaker-dietician can generally plan meals which include foods that will meet their requirements and at the same time satisfy the other members of the family. If the family is having broiled chops for dinner, older people who cannot eat them might have broiled lamb patties cooked at the same time. Or, if the dessert is chocolate nut sundaes, the little folks could have plain ice cream. Remember that the simple, wholesome foods which are important for the youngsters and oldsters are also good for normal healthy adults.

Meal-planning depends on the budget. The pattern of your meals will be affected by the amount of money which you have to spend for food. If you have an unlimited amount of money to spend, you can have tender cuts every day if you wish. Moderate and low-cost meals must necessarily depend upon the less expensive cuts. This topic is

CLASS PROJECT: ONE DAY'S MEALS: BREAKFAST, LUNCH, AND DINNER.

This is a three-part project, and the planning, preparation, and serving of a day's meals.

1. Plan three meals which would provide an adequate diet for one day. Each meal may require several class periods, but plan them as though they would be eaten on the same day. In each meal include a dish which you have not previously prepared. For example, you might have a new kind of quick bread for breakfast, egg salad or creamed eggs for lunch, and pot roast or oven roast for dinner.

2. After you have planned your menus, treat each meal as a separate project. Plan the work schedule and include any demonstration of food preparation which is necessary.

3. Serve each meal as a family meal should be served, including setting of the table, serving by the "father," table manners, and clearing away. Do not forget a centerpiece for each table.

4. After all three meals have been served, discuss the strong points and the weak points in the class work.

discussed more completely in Unit Ten, "Getting the Most Food for the Least Money."

Some rules for everyday eating. Here are several general rules for everyday meals which help to build health and promote pleasant living.

1. Eat regularly. Try to eat your breakfast, lunch, and dinner at about the same times every day.

2. Eat a good breakfast every morning. You should not expect the human machine to run efficiently all night and half the day without an adequate supply of fuel.

3. Try to distribute the day's food evenly among the three meals.

4. If you eat light breakfasts and lunches, try mid-meals to build up your energy. It has been scientifically proved that the stomach works harder when it is empty than when it contains food. An after-school snack of milk, fruit, or cookies is good, but do not eat so much that it spoils your appetite for dinner.

5. Do not eat excessive amounts of any food, no matter how much you like it.

CLASS ACTIVITIES

1. Have your own food habits changed any since your study of everyday meals? If so, in what way are they improved?

2. How are your own family meals planned to take care of the needs of individual members?

3. Make three luncheon menus for yourself, including a sandwich meal, a soup meal, and a salad meal. Compare these menus in class and judge them for the amount of building and energy foods, for protective foods, and for taste-appeal.

4. Discuss the desirability of eating a good breakfast. What is the meaning of the word, breakfast? How many calories do you generally get for breakfast? What proportion of your daily fuel feed do you get from your breakfast?

5. Try a balanced-diet contest. Your teacher will write several menus on the blackboard. Your problem is to determine how many of the basic food groups are represented in each menu. Write your answers on paper. When the time is up, exchange papers for checking.

6. If there is a cafeteria in your school, discuss the daily menus for variety. What suggestions for improvement can you offer?

7. Procure several old menus from a restaurant. Examine these for meal patterns. Are the combinations well balanced for food values, for appearance, and for taste-appeal?

FUN WITH FOOD AT HOME

1. Ask your mother if you may take charge of all the meals for one day. Report your success.

2. Add at least ten suggested meal patterns to your personal recipes.

3. *Setting the table and serving the meal*

Everyone aspires to a pleasant and gracious way of life. Mealtime, more than any other daily activity, helps to create this feeling of a happy and well-ordered existence. Good food, nicely served and eaten in a mannerly way, is the "basic recipe" for agreeable everyday breakfasts, luncheons, and dinners. In this problem we shall discuss the way in which table-setting and serving affect the meal.

Attractive simplicity rather than fussy formality. Most of us do not care for the formal kind of living in which every act is done by rule, and mealtime is no exception. There are many rules for setting a table and serving food on formal occasions, but for everyday meals we prefer a simple, common-sense procedure which fits our own particular needs. A meal at which the table is set in formal style and the food served in formal fashion can be beautiful, but the everyday meals with



Fostoria Glass Company

The place doilies, napkins, silver, china, and glass are combined here to create a beautiful and harmonious pattern in this table setting.

tables set for convenience and food served in a simple, informal way can also be beautiful. In the following paragraphs you will find some general suggestions for setting the table and serving the food at family meals.

1. The first requirement for an attractive table setting is cleanliness. Dishes, glassware, and silver should be shining. Tablecloths and napkins should be spotless. A table set with inexpensive place mats and paper napkins is more attractive than one set with handsome linens marred by jelly and gravy spots.

2. The table should have a well-ordered and harmonious appearance. Setting the table is really a problem in design. The linens, dishes, and silver must be arranged to create pleasing and unified effects. The table setting shown in the illustration above is beautifully harmonious. The rectangles of the doilies and napkins are placed to echo the rectangular shape of the table. How much more pleasing than if the napkins had been tossed carelessly on the table or had been folded into triangles. All silver is laid straight and parallel with a table edge. A small thing, such as placing butter spreaders diagonally, would have detracted from the general effect. The round shapes of the plates and the



The Peoples Gas Light and Coke Company

The simplicity of this breakfast table is equaled by its charm.

glassware contrast pleasantly with the rectangular shapes and straight lines. Would you not anticipate a more happy and gracious hour at this dinner table than at one where the arrangement was helter-skelter and completely lacking in harmonious organization?

3. The table should have a well-balanced arrangement of dishes and other accessories. In the case of a table where four covers are laid, as is shown in the illustration on page 387, it is not difficult to do this. Care should be taken not to crowd too many serving dishes at one end of the table. At tables where only two places are laid, a pleasing effect can be secured by arranging the covers and the centerpiece as shown in the

upper picture on page 5. Do not hesitate to move your centerpiece to one end or a corner of the table in order to design a well-balanced setting.

4. All dishes and silver should be placed for convenient use. Salt and pepper shakers should be within easy reach of each person at the table. Serving dishes and silver should be conveniently located. The knife is always placed at the right of the plate with the blade turned in, and the fork is placed at the left (unless no knife is used). Thus, they are convenient for use.

5. Each cover should have enough room so that the person is not crowded. About 20 to 24 inches is usually enough space for comfortable eating at the table. The dishes and silver should not be spread any farther than is necessary for convenience. Each cover is a unit and should be easily distinguished from the cover on either side.

6. The general rules should be followed in the simplest table settings. The charming breakfast table on this page shows that a very simple setting can also be attractive.

Rules for laying individual covers. The details of the individual cover vary with different menus. If we understand the general principles back of table settings, it is easy to select the right silver and dishes for each meal and to place them correctly.

1. The plate is placed in the center of the cover about an inch from the edge of the table.

2. The knives and spoons are placed at the right and the forks at the left of the plate. They should lie straight with the table, and their handles should be about one inch from the edge of the table. The tines of the forks and the bowls of the spoons should be up, and the blades of the knives should be turned toward the plate. There are exceptions to the rule which places the forks at the left. When no knife is required, the fork may be placed at the right, ready for use with the right hand. See the diagram of the first cover on page 391.

3. The water glass is placed at the tip of the knife. Most people use the right hand to lift the water glass.

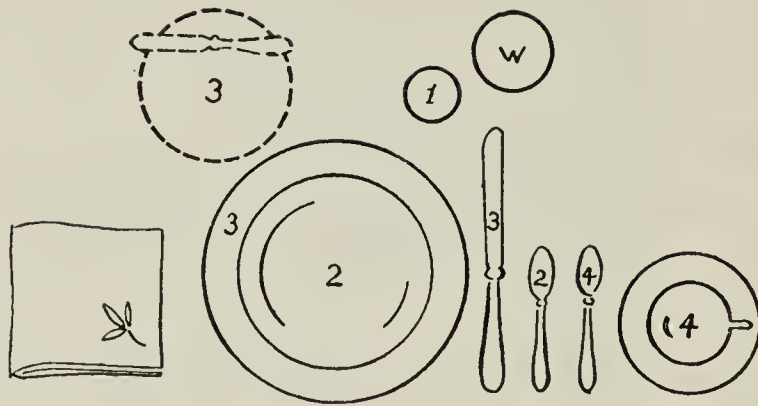
4. The bread-and-butter plate is placed at the tip of the fork. If a butter spreader is used, it should be placed on the edge of the bread-and-butter plate, either at right angles to the knives and forks as shown in the illustration of a setting on page 409 or parallel with them as shown in the diagram for Dinner 3 on page 392. Those who prefer to keep the service very simple may omit the bread-and-butter plates when the menu does not crowd the larger plate or when the salad plate can also be used for the bread and butter. The attractive breakfast cover on page 415 has no bread-and-butter plates.

5. Napkins are generally placed at the left of the forks. They may be folded in squares or rectangles as seems best suited to their size. Usually, they are laid so that the open corner is at the lower righthand corner. Some people prefer to place them with the open corner at the lower lefthand. When the napkins are ironed and folded, it is helpful to remember how the napkins will be placed, especially if they have stripes or monograms.

6. Silver is placed partly with reference to use and partly for appearance. For example, the spoon or fork which is used first is placed farthest from the plate. A bouillon spoon (short-handled) is placed farther from the plate than the spoon for dessert. The soup spoon with its long handle is sometimes placed next to the knife and sometimes outside the dessert spoon. A salad fork is placed next to the plate when the salad is eaten after the main course, but if the courses are served at the same time, as is customary in family meals, either fork may be next to the plate.

If several forks, knives, and spoons are required for a formal dinner with several courses, they are placed in order of use with a few exceptions. Setting the table for formal meals and serving formal meals are not discussed in this introductory book.

BREAKFAST NO. 1



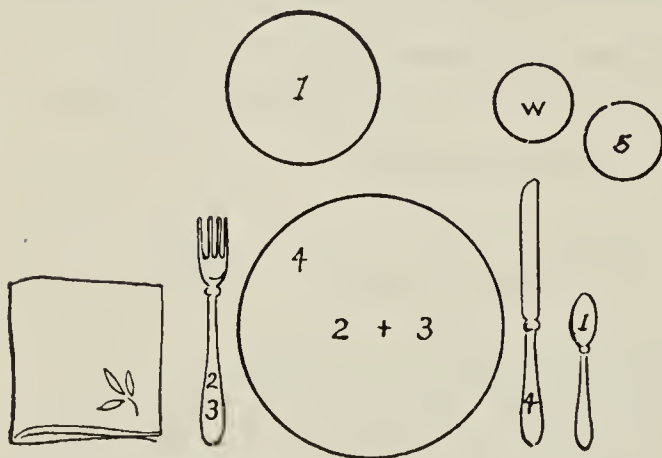
Orange Juice (1)

Cereal (2)

Muffins and Butter (3)

Cocoa (4)

BREAKFAST NO. 2



Cantaloupe (1)

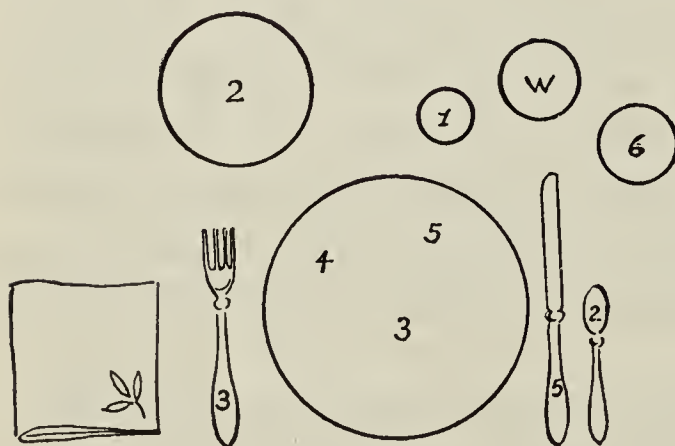
Bacon (2)

Fried Eggs (3)

Toast and Butter (4)

Milk (5)

BREAKFAST NO. 3



Grapefruit Juice (1)

Cereal (2)

Scrambled Eggs (3)

Toast (4)

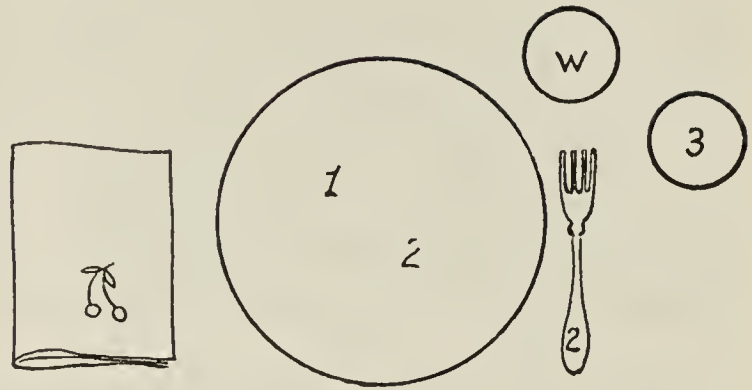
Butter and Jelly (5)

Milk (6)

Note: Dishes or silver shown by dotted lines are optional.

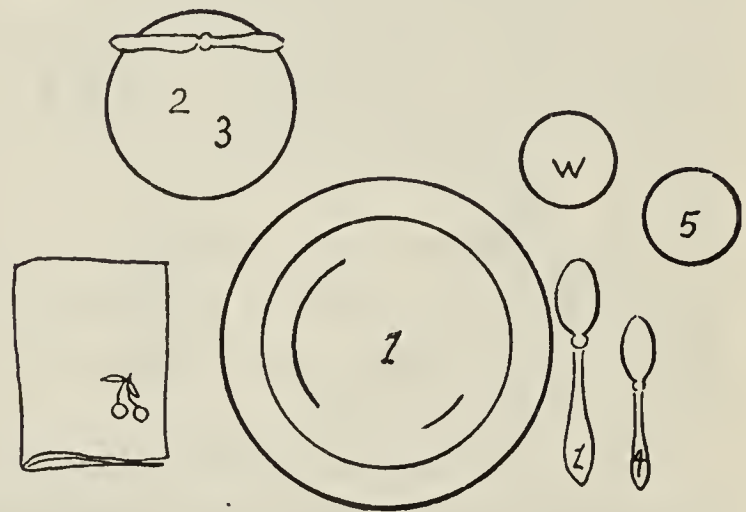
LUNCHEON NO. 1

- Cream Cheese Sandwiches on
Whole-wheat (1)
- Cole Slaw (2)
- Milk (3)



LUNCHEON NO. 2

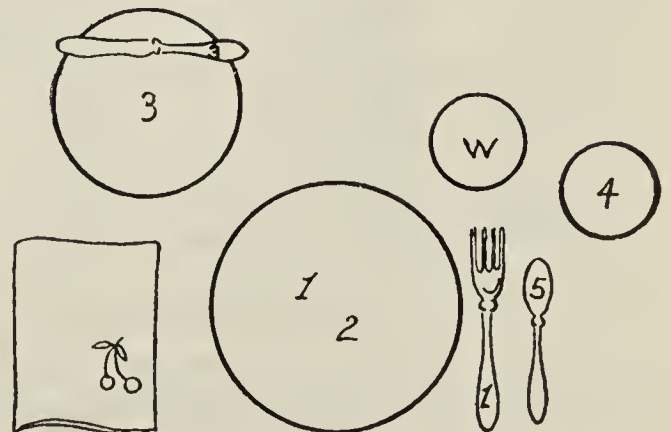
- Cream of Asparagus Soup (1)
- Salted Crackers (2)
- Hot Rolls and Butter (3)
- Apple Crisp (Served
later) (4)
- Milk (5)



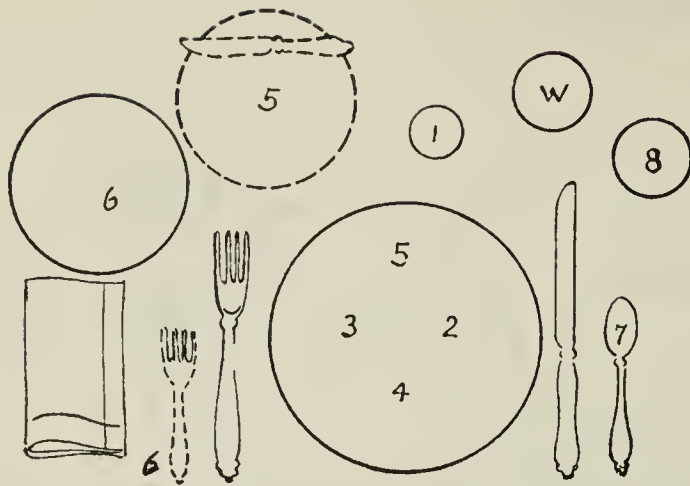
Note: If desired, the soup spoon which is used first, may be placed outside the teaspoon.

LUNCHEON NO. 3

- Tomato Stuffed with
Cottage Cheese (1)
- Mayonnaise (2)
- Baking Powder Biscuits,
Butter, and Jam (3)
- Chocolate Malted Milk (4)
- Fruit Cup and Cookies
(Served later) (5)



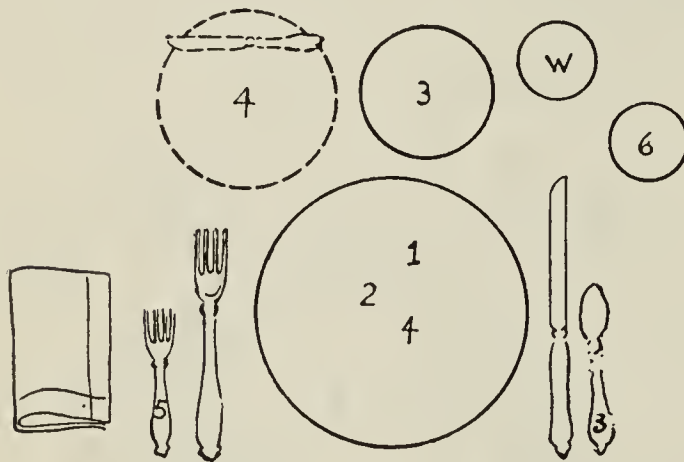
DINNER NO. 1



- Tomato Juice Cocktail (1)
- Swiss Steak (2)
- Mashed Potatoes (3)
- Spinach (4)
- Whole-wheat Bread (5)
- Fruit Salad (6)
- Floating Island (7)
- (Served later)
- Milk (8)

Note: The bread-and-butter plate may be omitted. In this case the salad plate is moved nearer to the tip of the fork. The salad fork may be omitted.

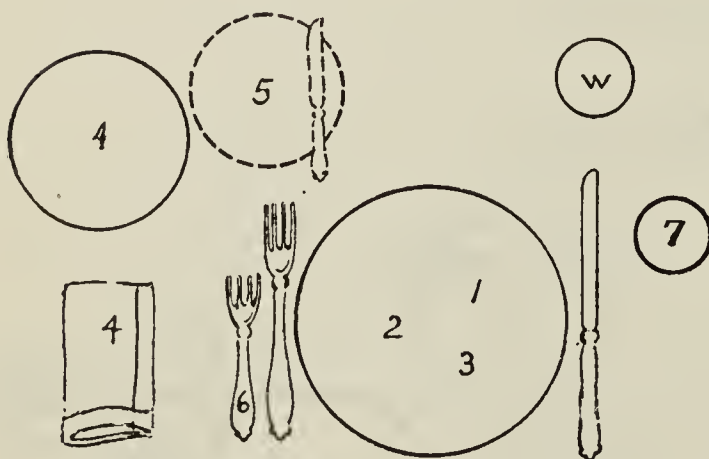
DINNER NO. 2



- Meat Loaf (1)
- Corn Pudding (2)
- Stewed Tomatoes (3)
- Sweet Rolls (4)
- Pineapple Upside-down Cake (5) (Served later)
- Milk (6)

Note: The bread-and-butter plate may be omitted. The salad fork is often placed next to the plate with the dinner fork outside.

DINNER NO. 3



- Roast Lamb (1)
- Mashed Potatoes (2)
- Green Peas (3)
- Tossed Green Salad (4)
- Enriched White Bread (5)
- Pumpkin Pie (6)
- (Served later)
- Milk (7)

Note: The bread-and-butter plate may be omitted. The dinner fork is used for both the main course and salad. An alternate arrangement is to put the dinner fork outside and the dessert fork next to the plate in order of use.

7. Use no silver or dishes which are not necessary. If the meal does not include food which must be cut with a knife or butter for spreading, do not place a knife on the cover. The same rule applies to any piece of silver or any dish.

8. Simplify the cover for family meals according to common sense and personal preference. Many people do not consider it necessary to use both a dinner fork and a salad fork even though both main dishes and salad are included in the menu. They may also prefer to omit the butter spreader and perhaps the bread-and-butter plate. See the illustration of Dinner 3 on page 392. If these three items are omitted from the covers in a family of four, there are twelve less items to be placed upon the table, carried to the kitchen, washed, and returned to the cupboards. Of course, this type of simplification should not be carried too far, but simple table settings can be attractive as well as sensible.

Table setting depends on the menu. Do you set the table according to the menu, or do you put the same silver and china on the table each time, regardless of the dishes to be served? It is always a good idea to ask about the menu before you set the table. Why put on two spoons if none will be used? You will only have to pick them up after dinner and return them to their cabinet.

The diagrams on pages 390, 391, and 392 show how covers should be laid for three different types of breakfasts, luncheons, and dinners. Notice that the dotted lines show china and silver which may be omitted if you prefer to keep the service as simple as possible. Study the menus and diagrams to see how the covers are laid.

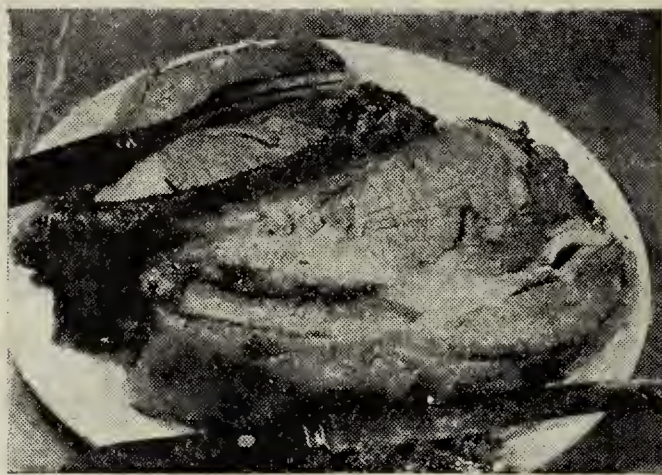
Serving everyday family meals. There are three types of service, known as the Russian or formal type, the English or family style, and the compromise style. Very few people care to use the formal style of serving for everyday meals; most prefer the family style. In the formal style of a service, all food is served from the kitchen by a helper, and the host and hostess have no duties to perform. In the family style of service, all the serving is done at the table by the host and hostess, mother and father, or other members of the family. For everyday family meals, the father generally carves the meat and fills the dinner plates. The mother may pour the coffee or tea at the table and serve the dessert. Plates are passed back and forth by the members of the family. This is a jolly and friendly style of serving and generally helps to keep mealtime a happy one. It is popular in England and has been universally adopted in America.

The compromise style is a combination of the formal and informal

CARVING THE BEEF ROAST



Swift and Company



Left: In buying a standing rib of beef, have the backbone cut from the ribs. Use a flat platter. Place largest flat surface down, ribs at carver's left, with ends of ribs toward carver. Insert carving fork, tines pointing down, beneath the top rib. Slice across the top from right to left, making a one-fourth-inch slice. If the knife touches the rib bone, remove the knife. With the tip of the knife, cut along the side of the rib bone to release the slice. If necessary, use the fork with the knife in removing the slices to the platter.

Right: Continue slicing, removing rib bones as each one is freed from the meat.

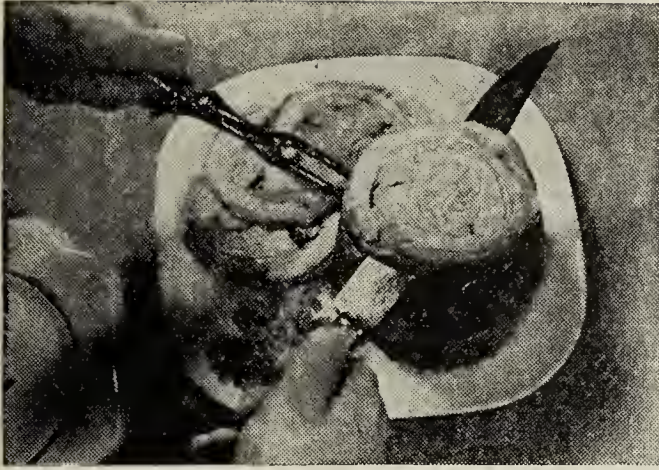
styles. Some of the dishes are served as separate courses. If there is no helper for bringing the food to and from the table, a member of the family may serve in this capacity. For instance, soup and dessert may be served from the kitchen as separate courses. The soup will be on the table when the diners come to the table. The soup plates will be removed, and the meat and vegetable serving dishes will be placed before the person who is to do the serving at the table. The salads are generally put at each place before the meal is announced. After the main course has been finished, all dinner plates, salad plates, bread-and-butter plates, and serving dishes are removed. Then the dessert is served from the kitchen or perhaps at the table. This style of service is used by many for both family and company meals.

Setting the table for family-style service. Each cover should be set so as to provide the proper service for the menu. In addition to the covers, provision should be made for serving dishes. These also vary according to the foods included in the menu.

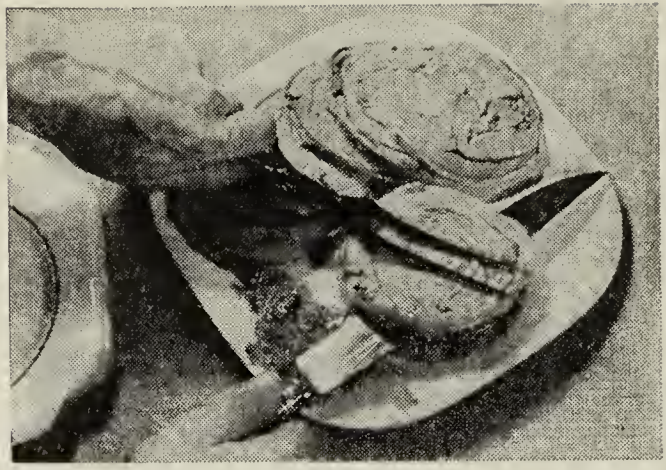
1. Place mats or pads for hot dishes in front of the cover for the father or person who will do the serving. Try to leave enough space for the dishes without crowding.

2. Place the necessary serving silver—tablespoons, carving knife and fork, or other implements—to the right of the father's cover. Never

CARVING THE VEAL ROAST



Swift and Company



Top left: Short compact rolled roasts may be placed on end. The slices are removed by cutting across the face of the roast, parallel to the platter. *Top right:* To remove the last few slices, hold meat with the fork, tines up.

Bottom right: In carving a long boneless roll, place the roll on one side and carve slices by cutting down to the platter. The strings tying the roll are best removed as they are reached in the carving process.



place these upon the platters or in the vegetable dishes. Lay them so that they are harmonious in line with the edges of the table.

3. Combine the foods on one platter when possible. One large platter takes up less room and is more attractive than two or three separate dishes. The platter in the illustration on page 333 has a combination of steak, mushrooms, mashed potatoes, and stuffed peppers which is very attractive.

4. Other serving dishes for jelly, butter, pickles, celery, and raw vegetables may be placed at various strategic points and passed around the table. Spoons for these dishes should be laid near the dish, never in it, until it is passed. Remember to keep the spoons straight with the table.

When you are waitress. In most families, a younger member of the family generally helps to serve the food and to remove the dishes. If you are the official family waitress (or waiter) you should know how to do your job easily and correctly. There are a few simple rules for serving and clearing the table which everyone should learn. These rules apply to family and compromise style service, and are equally correct when the family eats alone or when there are guests.

1. Be alert and ready to do your job whenever the hostess gives the signal.

2. The first course, such as soup or fruit cup, may be on the table when the family sit down at the table.

3. Never stack the dishes on the table, pick up the used silver, or do any other preliminary dishwashing steps at the dining table. Remove the main plate first, then the others.

4. Never reach across the cover in front of the person seated at the table for any purpose.

5. Pass all dishes such as rolls from the left, thus giving the person who is seated an easy opportunity to take the food with his right hand.

6. Serve all dishes from the left, setting each one down with your left hand. Again there is an exception, the beverages.

7. Remove the used dishes from in front of each person from the left. It is best to do this with the left hand because this prevents bumping the person with the right elbow. This lefthand service should be used for the removal of all used dishes, soup plates, main course dishes, and others with one exception, the beverage cups and glasses.

8. Beverage cups and glasses should be served and removed from the right. To do these things from the left would cause the waitress to reach across in front of the person.

9. After the main course, remove the serving dishes, the large plates, the salad plates, and the bread-and-butter plates. (Remember, no stacking!) If necessary, crumbs and other particles of food should be removed by brushing them off with a folded napkin onto a clean plate or a small tray.

10. Water glasses should be refilled without removing them from the table. A folded napkin with the water pitcher can be used to prevent drops of water from dripping onto the table.

In arranging the serving dishes for the main course or for the dessert, it may be necessary to rearrange the cover of the person who is to do the serving. The water glass and bread-and-butter plate may be set to one side to make serving more convenient.

11. In the case of a left-handed person, a thoughtful hostess and waitress will reverse the usual procedure and serve from the right. Beverages should be placed at the left.

Duties of the host and hostess. When guests are invited to join the family for an everyday meal, it is not necessary to provide place cards or similar accessories which are used for special occasions. But every effort should be made to make the guest feel comfortable and at home. The

hostess will tell him where he is to sit at the table and will watch to see that he is served properly.

The host will see that he is offered second helpings from the serving dishes. As the host fills a plate with food, he will pass it to the nearest person, indicating for whom it is intended. This will prevent the plate from being passed all around the table before it is finally located. Some people prefer to serve the hostess and the other ladies present first, and others prefer to serve the guests before the hostess. This is a matter which can be settled as you wish.

Carving the meat. Perhaps the most important and difficult task for the head of the family is carving the meat. In the family and compromise styles of service, the head of the family carves the meat at the table whether guests are present or not. The pictures and directions on pages 394 and 395 show you how to carve a standing rib roast, a long veal roll, and a leg of lamb.

A centerpiece for everyday meals. The simplest type of breakfast, lunch, or dinner acquires a bit of glamor from very simple table decorations. A centerpiece consisting of a few bright-colored flowers from the garden can make the meal seem more pleasant. Those who feel that it is too much bother to provide some kind of adornment for the dining table are missing an opportunity to make family meals more agreeable. Every member of the family cannot help but be proud and happy to sit down at a table which is attractive. A simple and inexpensive centerpiece can do much to create the atmosphere of gracious living.



Sunset Magazine

These centerpieces are made from common and easily obtainable plant materials.

Flowers from the garden or wild flowers gathered from the fields can be used effectively to give sparkle to the dining table. Dried flowers and branches, potted plants, vegetables, fruits, and gourds can be used successfully. A little imagination in the treatment of these materials often results in charming decorations.

The upper arrangement on page 397 is made from materials available in the fall of the year. Zucchini and Danish squashes are combined in interesting shapes and sizes. Dark-red chrysanthemums with yellow centers, which echo the yellows in the squashes, red arbutus, and unedo berries, add interest to the arrangement. After this centerpiece has served its purpose in the middle of the table, the squashes can appear on the dinner plates.

Another beautiful and appealing centerpiece is shown on page 397. In this case the humble cabbage has done a Cinderella act and appears in party dress. The lovely blue-green of the cabbage is enhanced by the yellow chrysanthemums tucked in among the leaves. Be careful when making dining-table centerpieces to avoid tall arrangements which prevent people who are opposite from seeing each other.

CLASS ACTIVITIES

1. Discuss the points for and against using bread-and-butter plates and salad forks at everyday family meals.

2. What silver and china would you use for the menus on page 376?

3. How much more time does it take to set a table nicely than to put the silver, china, and linens on carelessly? Hold a comparative test in the school dining room. Set four covers for serving the Dinner No. 3 given on page 392. First, set the table as carelessly as you might if you were concerned only about getting the job done. Second, set the table correctly, but work quickly and carefully. Note the amount of time for each operation. How much time was saved by dropping the pieces hurriedly and carelessly? If time is saved in this manner, do you consider it worth while? In what way can a nicely set table contribute to a pleasant family meal?

4. Hold a table-setting contest. Your teacher will give you ten minutes to decide what pieces of silver and china are required for the table as it should be when the family sits down to the meal. Then each group will have an opportunity to set the table while the others watch. Arrange for judges to decide which group worked most efficiently. Correct table setting, not speed, is the aim, but no group should take an unreasonable amount of time.

5. Have a practice lesson in serving. Let each member of a group play the part of a member of the family, including father, mother, boys, and girls; let one person play the part of the guest. Sit at the table as though you were

having a real meal. Use real dishes, silver, and glassware; choose a menu which includes soup, a meat course, and a dessert. Let the "mother" choose a different "boy" or "girl" to remove the soup course, bring the main course, remove the main course, and bring the dessert. "Father" can go through the motions of serving and passing plates to those who are seated at the table. "Father" might explain briefly how to carve a roast or other cuts.

6. Bring plant materials to class and arrange table centerpieces.

FUN WITH FOOD AT HOME

1. Take charge of setting the table for dinner every night for a week. Check your own work for speed and accuracy. Report to the class on your observations on your own work.

2. Take charge of serving several meals and clearing the table. Are you able to find any ways of making the meals more pleasant?

4. *Good meals deserve good manners*

You may have a heart of gold and a high-powered brain, but without good manners, you probably will fail to impress other people with your superior qualities. Good manners may be only an outer characteristic, but they may make the difference between your success or failure in business and popularity or dislike among your friends. No one should feel that good manners are a silly affectation. You are silly if you do not strive to acquire them.

Nowhere is the lack of good manners more distressing than at the table. It does not add to the pleasure of one's meal when a companion makes himself objectionable with uncouth eating habits. It is very worth while to know table etiquette, both for the sake of the impression it makes on others and for one's own personal satisfaction.

General rules for mealtime manners. First, we will consider the etiquette of general behavior at the table and, later, the special techniques of eating. There is much more to table etiquette than how to hold one's knife. Good manners are based on consideration for others, and this can be expressed in many ways at the dinner table.

1. Good manners are equally desirable for family meals and company meals. Everyday courtesy at the table can do much to promote happy and pleasant family meals. Besides, you cannot hope to have good manners without practice, and the everyday breakfast, lunch, and dinner offer an excellent opportunity for practice.

2. Always be clean and neat at meals. Wash your hands before every

meal. Dirty hands may provide an easy journey for disease germs into your body. Cleanliness is just as important at lunchtime in the school cafeteria as when you eat at home. Perhaps more so.

3. Be on time for meals. This is equally important for family meals, for company meals at home, and when you are invited out. It is inconsiderate of the cook to keep good food waiting, and, besides, your food will not be as appetizing if you let it stand.

4. When meals are announced, do not rush into the dining room and flop into your chair ahead of the others. An even break for everyone is fair.

5. At company meals, the men and boys follow the ladies into the dining room and assist them by pulling out their chairs and pushing the chairs forward as the ladies are seated. At a party where there is an even number of couples, the boy assists the girl at his right.

6. Everyone sits down at the table at the same time. Those who are first should wait until the others are ready to sit.

7. Do not begin eating the instant you get into your chair. Wait until everyone is ready and the hostess has lifted her fork or spoon. Another reason for waiting is for the saying of grace. Many families give thanks at every meal.

8. As soon as you are seated, put your napkin in your lap. Large napkins are partly unfolded, but very small napkins may be completely unfolded. Your napkin should remain in your lap until the meal is finished. At home you should fold it neatly and lay it by the side of your plate or put it in its ring. When you are away from home, you do not fold it because it will not be used again until it has been laundered.

9. Keep your hands in your lap when you are not using them in order to eat. Do not play with the silver, lean on your elbows while eating, make bread balls, twirl your water glass, or otherwise make yourself an annoyance.

10. Do your share in keeping the conversation pleasant and interesting. This is equally important at family and company meals. Do not bring your troubles or your grouches to the table. Avoid talking about subjects which may be objectionable to others at mealtime, such as illness or operations. Avoid arguments.

Avoid making a demonstration about foods which you do not like. Do your best to eat the food which is served. After all, someone has expended considerable effort in preparing it. Try to eat as much of it as you can.

Learn the right techniques of eating. Rules for managing our food and eating implements are intended to prevent us from seeming crude and vulgar to others. Remember that your food is chiefly important to yourself. Do not make your eating conspicuous or objectionable to others. Try eating in front of a mirror. Do you enjoy watching yourself eat? You might also try listening to yourself eat and drink! Do you gasp and smack your lips and chew audibly? Is it pleasant listening?

Here are some rules which should help you to form good eating habits.

1. When chewing, keep your mouth shut! No one cares to see how well you chew your food!

2. Don't talk with your mouth full. If someone asks you a question, wait until you have swallowed the food before answering, and remember next time to take smaller mouthfuls.

3. Be quiet about your eating. Nothing is more repulsive at the table than to listen to someone gulp and smack over his food.

4. Be neat with your food. Do not scatter crumbs or bits of food on the tablecloth. Do not stir your food on your plate into a messy-looking mass. Keep your knife and fork on the plate where they belong, not hanging off the edge where they may dribble upon the cloth.

5. Do not hurry and do not dawdle with your food. Don't wolf it down and don't let it get stale before you eat it!

6. Be thoughtful of the needs of others. If a dish near you is needed, pass it without being asked.

7. Never reach or grab for food. You will get your share. If necessary, ask for what you want but make your request pleasant.

8. Manage your silver inconspicuously, and learn the rules for correct usage. Then practice the right methods of handling knives and forks and spoons at every meal until the right methods are automatic.

Form habits of eating with good manners. Are your table manners always good? Do you have to stop and think before you can remember how to hold your fork or how to eat your bread? Good manners should be as automatic as writing or riding a bicycle. First, you must be sure that you know the right thing to do; second, you should check your own manners according to the approved standards; third, you should practice the use of good table manners until they have become habits. This requires self-analysis and honest self-criticism and practice. This means everyday practice at breakfast, lunch, and dinner. It is not possible to be sure of our manners if we use them only for company.

YES!



NO!



YES! DO—

Hold your knife and fork easily with forefingers extended as shown in the picture on page 402.

Cut only two or three bite-size pieces at one time.

Use the fork with your right hand, with tines turned up for carrying food to your mouth. (In Europe the fork is used with the tines down.)

When finished, leave your knife, with the blade turned in, and the fork in the center of the plate.

Break your bread or roll with your fingers and butter only one piece at a time.

Sip from the side of your soup spoon.

Keep your beverage spoon on the saucer.

Cut your salad with a fork if possible, but use your knife if necessary.

NO! DON'T—

Grab your fork like a dagger and your knife like a sword.

Cut all your food into little pieces before beginning to eat.

Make motions with a knife, a fork, or a spoon in your hand.

Prop your eating silver on the edge of your plate.

Scrape a dish with knife, fork, or spoon.

Carry food to your mouth with your knife.

Butter a whole slice of bread and bite it off as desired.

Push your whole soup spoon into your mouth.

Bend over the table and meet your spoon or fork halfway.

Leave your beverage spoon sticking out of the cup.

Use your own silver to take food from a serving dish.

CLASS ACTIVITIES

1. Let each member of the class make a list of her own worst faults in table etiquette. Compare these lists to see how many of the same faults are listed by several people. Discuss ways of correcting those wrong habits.

2. Discuss table manners as you see them in the school cafeteria. What could be done to improve the general lunchroom etiquette? How many pupils wash their hands before going to the lunchroom? How could this habit be established?

3. Give your opinion of such remarks as these at a dinner table: "I'm sick and tired of eggs." "I'm too full already." "Fingers were made before forks." "He sure licked the platter clean." Are these remarks dull? Clever? Amusing?

FUN WITH FOOD AT HOME

1. Try to make your family meals more pleasant by improving your own table manners. Report your success.

2. If you can interest another member of your family in practicing good table manners, arrange for check-ups on each other. Remember never to criticise the eating manners of older people.

5. Attractive backgrounds for everyday meals

Everyone likes to feast the eye as well as the inner man. Meals which are eaten amidst attractive surroundings are more enjoyable than those which must be swallowed against dull and ugly backgrounds. China, silver, linens, furniture, and walls—the whole room—form a background for mealtime. Good taste in the selection and arrangement of these background properties can do much to make breakfast, lunch, and dinner pleasant experiences, and to make home a place where the family likes to spend its time. This does not require the expenditure of considerable money in order to acquire luxurious furnishings. Often, simple, inexpensive furnishings have great charm.

What type of effect do you prefer? When you plan your first dining room or breakfast nook, decide upon the general type of scheme which will please your fancy. Do you enjoy old-fashioned designs in china and silver and period styles in furniture? Or do you prefer design in the modern manner, with emphasis on straight lines, smooth surfaces, and restraint in ornamentation? Do you like bold effects? Or delicacy in pattern? Do you like gay simplicity or quiet elegance? Do you like a particular historic style?

Lovely dining rooms have been created in many styles. Your first problem is to decide what kind of effect appeals to you most. The pictures on pages 405 to 407 show three different types of dining rooms, each with its own special charm. The quaint simplicity of the room on page 405 is delightful. The maple furniture in early American style is sturdy and comfortable. The drop-leaf table can easily be enlarged to accommodate several people. The rag rug is well chosen for harmonious effect with the furniture. The accessories are selected for their simple, informal quality, which is the keynote of the room. The dishes are gay and unostentatious; the pewter candlesticks, the old glass vase used for the centerpiece, and the old teapots and coffee grinder all lend an air of pleasant charm. It is easy to imagine many comfortable and happy meals in this room. Our colonial ancestors knew how to make their homes hospitable and appealing.

The dining corner shown in the illustration on page 406 is distinctly modern in character. The furniture has straight lines, smooth surfaces, and the absence of decoration which is typical of the twentieth-century style. The light, clear finish of the natural wood adds another modern note. The large corner windows with an unobstructed view contribute

a great deal to the pleasant quality of the room. The dishes are beautifully shaped in plain colors, pale blue and ivory white. The table mats and napkins are a deeper shade of blue, and the draperies are golden yellow. The open shelves which set the breakfast nook apart from the kitchen are light blue, and the chair seats are covered with a deep-blue fabric. The whole effect is delightful, with a special appeal for the modern-minded.

The dining room on page 407 has another kind of beauty, which gives the impression of richness, elegance, and formality. The furniture is copied from the styles used in the great colonial houses of the eighteenth century. The fine proportions and graceful lines in the design of the furniture suggest the luxurious and leisurely quality of life in those days. Notice the restraint of ornamentation in the metal drawer pulls, the carved medallions on the chair backs, and the fluted table legs. The cabinet holds china of formal pattern which blends well with the general scheme. The flower arrangement is formal and is well suited to the room.

Does one of these rooms appeal to you especially? You may like them all, yet prefer one for your own.

Plan ahead for your dining room. Having settled upon your general scheme of decoration, you are ready to select the various articles of furnishing. Much of your selection may be done long before you are actually ready to make a purchase. It is fun to plan a dream room that satisfies the desire for a pleasant place to eat. So plan ahead for your silver pattern, china, linens, and other dining-room furnishings. Many people acquire their silver and linens long before they have a dining room of their own. Long-range planning is especially important for beauty in the dining room.

The selection of your silver pattern. There are two points to consider in the choice of a silver pattern: (1) Will you buy sterling or plated



Consider H. Willett, Inc.

The quaint simplicity of this maple-furnished dining room is derived from early Colonial styles.



Popular Home of the U. S. Gypsum Company

This dining corner is furnished in good modern style.

ware? (2) What type of pattern will give you lasting satisfaction?

The difference between sterling and plated silver is not revealed in the appearance of the silver. The difference lies in the amount of silver used and in the method of using it. Sterling silver, sometimes called "solid silver," actually contains a small percentage of copper, necessary to harden the product. Sterling flatware is obtainable in different weights: heavy, medium, and light. The prices vary according to the amount of silver used.

Plated silver is made by coating a base metal with silver by an electroplating process. Some plated ware is better than others because the plating is heavier. The number of

platings is not an accurate guide to the thickness of the coating because quadruple plating of very thin coats is not as heavy as triple plating of heavier coats. When you are buying plated silver, try to find out about the weight of the silver used. Your choice between sterling and plated depends upon how much you wish to spend. Naturally, sterling is considerably more durable than plated ware, but it is also more expensive.

Sterling can be handed down from generation to generation and plated silver may wear out within your lifetime, depending upon its quality and its use. Some good plated silver carries a long-term guarantee.

The selection of a design need not be influenced by the quality or cost of the silver. Excellent designs are obtainable in both sterling and in lighter-weight plated silver. The choice of a pattern depends upon personal preference but should be made with reference to the general scheme which you wish to create.

The selection of your china. Points for consideration in the selection of table china are: (1) the quality and price of the ware and (2) the design with relation to personal preference and the general scheme of decoration.

The term "china," correctly used, refers only to the type of dinner-



Drexel Furniture Company

This dining room reflects the elegance and luxury characteristic of eighteenth-century styles.

ware which is also known as porcelain. This type is hard, strong, and is easily identified by its translucent quality when held to the light. When tapped with a pencil, it gives a clear, bell-like tone. This is the most expensive and finest of dinnerware. Minton, Haviland, and Lennox are examples of porcelain.

Earthenware is less hard and not translucent. It is sometimes called semiporcelain. The better grades of earthenware include Wedgwood, Spode, and Lennox. Earthenware varies considerably in quality and type. Pottery is one of the less expensive types and has been used in recent years for many gay, bright-colored breakfast and luncheon sets. These are the least expensive of the various types of dinnerware, but can contribute much to a delightful table setting.

The dinnerware pattern which you select may be plain-colored, a simple banded pattern, or richly decorated, depending upon the type of table setting which you prefer. The modern table setting in the upper picture on page 408 shows interesting squared plates that are expressive of the modern style. In the lower picture a charming, old-fashioned effect is created in the table setting by the use of historic-style china and milk-glass goblets.



Golden-hued Dirilyte



Westmoreland Sterling Silver

Top: The severe simplicity of design in these table accessories is characteristic of modern design. *Bottom:* Old-fashioned milk glass and historic style china lend charm to this table setting.



Libbey Glass Company



The Towle Silversmiths, Newburyport, Mass.

Top: Lovely, clear glass against a background of plain art linens and polished wood gives distinction to this table. *Bottom:* This delightful effect is created by an especially successful combination of table linens, china, glass, and silver.

The selection of glassware. Glassware is extremely important for its decorative possibilities. The clear, sparkling reflections of beautiful glass can add great beauty to a table setting. Note the lovely effect of the glass goblets and sherbet dishes shown in the upper illustration on page 409. In general, plain glass of good quality can add more beauty to a table than glass with etched decorations.

Glassware varies in quality from very fine blown ware to handmade pressed glass to cheaper machine-made glass. It is not always easy to distinguish qualities, but you may be able to see the ridges left from the molds in machine-made glass. Blown glass gives a clear, rich ring when tapped with the fingernail. Pressed and machine glass do not give the same clear tone when tapped.

Clear, hand-blown glass is sometimes called crystal. Colored and iridescent glass is particularly well chosen for everyday table settings.

The selection of table linens. Not all table linens are made from linen. Our use of the term dates back to the days when our ancestors considered a damask-linen tablecloth the only correct cover for the table. Modern table linens may be made of cotton, rayon, or linen and vary greatly in character. Linen-damask tablecloths and napkins are generally used only for fine occasions when we wish to serve a formal dinner. In recent times damask tablecloths and napkins have been made in pastel shades as well as in white. The delicate colors lend a charming elegance to the table setting. Damask is the most expensive of all table linens, and many people do not use it.

Very beautiful and interesting table covers of other types are now obtainable. The art-linen table cover shown in the upper illustration on page 409 makes a splendid background for the silver and china. Such cloths are obtainable in delightful colors.

In recent years there has been a strong preference by many homemakers for place mats instead of one large cover. These vary in material from plastics to old-fashioned homespuns. The place doilies shown in the lower illustration on page 409 are hand-woven cottons. Obviously, place mats or doilies are timesavers for the homemaker.

Plan your table accessories for harmonious effect. All dining-room table accessories and other articles of furnishing should be selected according to a general scheme. Do not choose silver, dinnerware, linens, and furniture without reference to each other and expect to have a harmonious and unified effect. This does not mean that you must stick to a period style of furnishing. It is quite possible to mix historic and modern designs successfully, but it must be done with taste.

No standard recipe for the selection and combination of table accessories or dining-room ensembles can be given. Each table and each room is a new and separate problem which you must work out to your own satisfaction. This is the time when the lady of the house becomes a homemaker-artist. Instead of using paints and brushes, she uses silver, plates, doilies, napkins, chairs, and other furnishings to create her picture. When someone looks at her table and says, "It's as pretty as a picture," she will know that she is a real creative artist.

Here are a few general suggestions for selecting dining-room furnishings to be used together.

1. Decide upon the general type of effect which you wish to have. Will it be luxurious and expensive? Simple and pretty? Old-fashioned? Modern? Quiet? Bold and daring? Study the dining rooms and table settings shown in this unit with this thought in mind. What type would you choose if you were able to start on your plan today?

2. Remember that walls are the background of a room against which the furniture is seen. Highly patterned wallpapers and overly strong colors are not good backgrounds. In the same way, tablecloths and doilies are backgrounds for dishes, silver, and food. A boldly figured tablecloth is seldom a good background for a table setting. Luncheon cloths with floral patterns in bright colors are pretty by themselves but generally give the luncheon table a somewhat confused appearance. Lace tablecloths are also lovely by themselves and may make very nice table covers between meals, but when they are used for dinner table settings, they are likely to detract from the beauty of the china and silver.

Study the combinations of accessories in the lower picture, page 409. The china is beautifully designed and is used as the center of interest. The silver is plain and simple; it has a modern character but combines nicely with the china. The place mats are striped but make an excellent background for the china and silver. The napkins are plain linen with crocheted edges matching the edges on the place mats. (How many of the basic food groups do you think will be included in this meal?)

Now study the combination of accessories in the upper picture, page 408. In this case the china is interesting in shape and without decoration; the silver is also simple in design. This requires a plain background which does not overwhelm the objects placed upon it. Notice the delicacy and gracefulness of line in the glassware and the antelopes.

3. Use color effectively. This is the age of color, and it is reflected in modern table settings. There was a time when white tablecloths, white



Popular Home of the U. S. Gypsum Company

This breakfast nook is set off from the kitchen by a counter which is useful in both areas.

gold-banded china or white dinnerware with a pale-colored pattern, and clear glass were considered the finest selection. Now, we welcome colored tablecloths and place mats, strong bright-colored china, and brightly painted dinette or breakfast furniture sets. Of course, our enthusiasm of color should not lead us to use it without discrimination. A combination of too many strong colors is not pleasant and does not add an enjoyable note to mealtime. Before you decide upon a combination of colors, "try it on the eye." Select good-sized samples of the colors which you are considering and lay them together on the table. Do they seem to belong together? Is there one color which seems off key?

Which color is the best background color for walls, table tops or place mats? Is the combination lifeless? Does it need a brighter color to add spirit and gayety to the combination.

Where will you eat? In old-style traditional houses there was not much question about where the eating was to be done. It was either in the dining room or perhaps at the kitchen table. Now, many changes have occurred in our eating arrangements. Many homes have breakfast nooks or dinettes for simple, informal meals, as shown in the photograph above. Other houses have neither dining room nor dinette, and the end of the living room is set apart for eating purposes. Some new homes are planned with an outdoor eating terrace or patio.

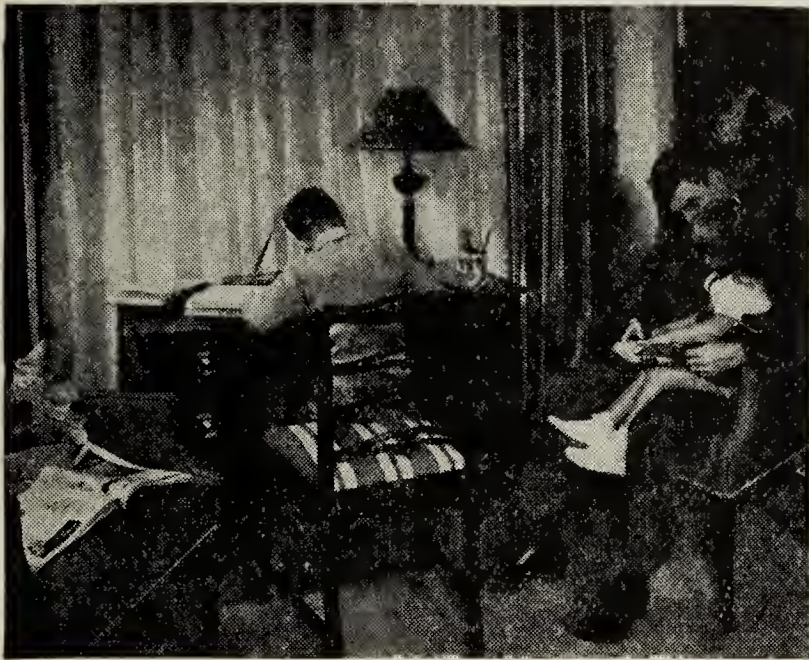
All these changes have occurred because homemakers feel that space devoted to eating purposes should be better planned for family living. Breakfast nooks are handy to the kitchen and help to make meal preparation and serving more simple. Separate dining rooms have been eliminated from some houses because homemakers feel that it is extravagant to use a room only a short time each day and not receive any use from it except at mealtime. The combination living-dining room is one answer to this problem.



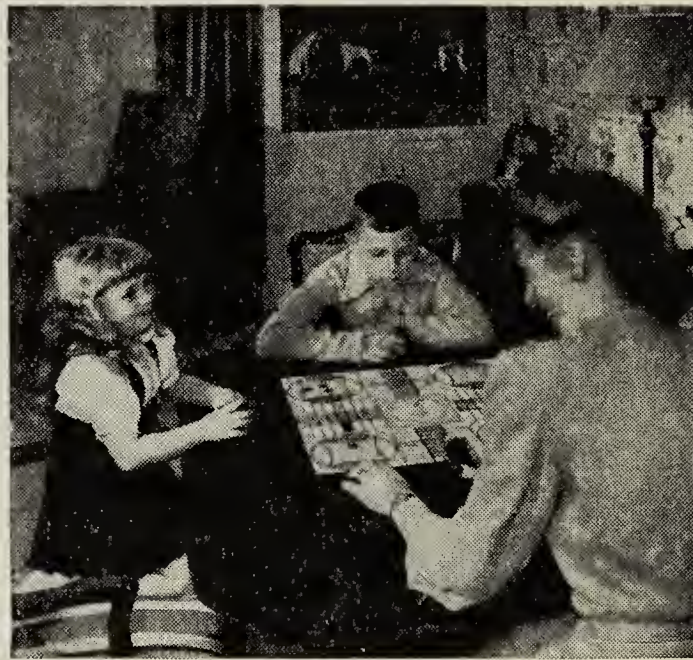
When not in use, the sewing cabinet doubles as serving table. The large table, close by for cutting patterns, is argument enough for sewing in the dining room. See colored photograph at the front of the book.



Lower shelves of built-ins have doors to provide storage space for games, records, odds and ends.



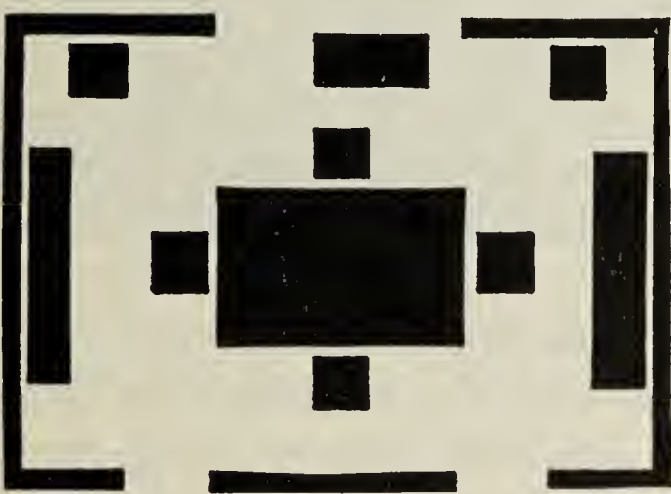
With added pieces of dining-room furniture, quite a variety in arrangement is possible. Here a comfortable place for homework and relaxation is provided.



Dining table extends into the room from one wall. Between meals it becomes a center for family games and for studying when desk is in use. When there is company, it can be drawn out into the center of the room.

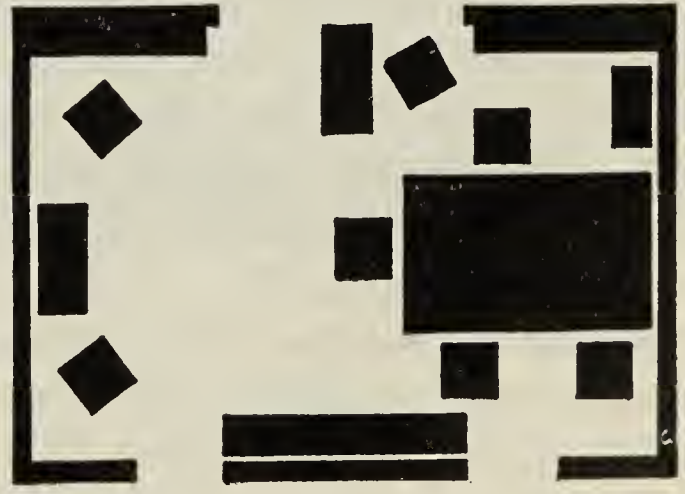
A LAZY DINING ROOM BECOMES A BUSY FIVE-PURPOSE ROOM

Better Homes and Gardens Magazine



Before: 3 hours of dining

Between meals this substantial dining room stands idle like many an old-fashioned one.



After: 18 hours of living

Given fresh colors, twin built-ins, and a pair of chairs, the same room now does five jobs.

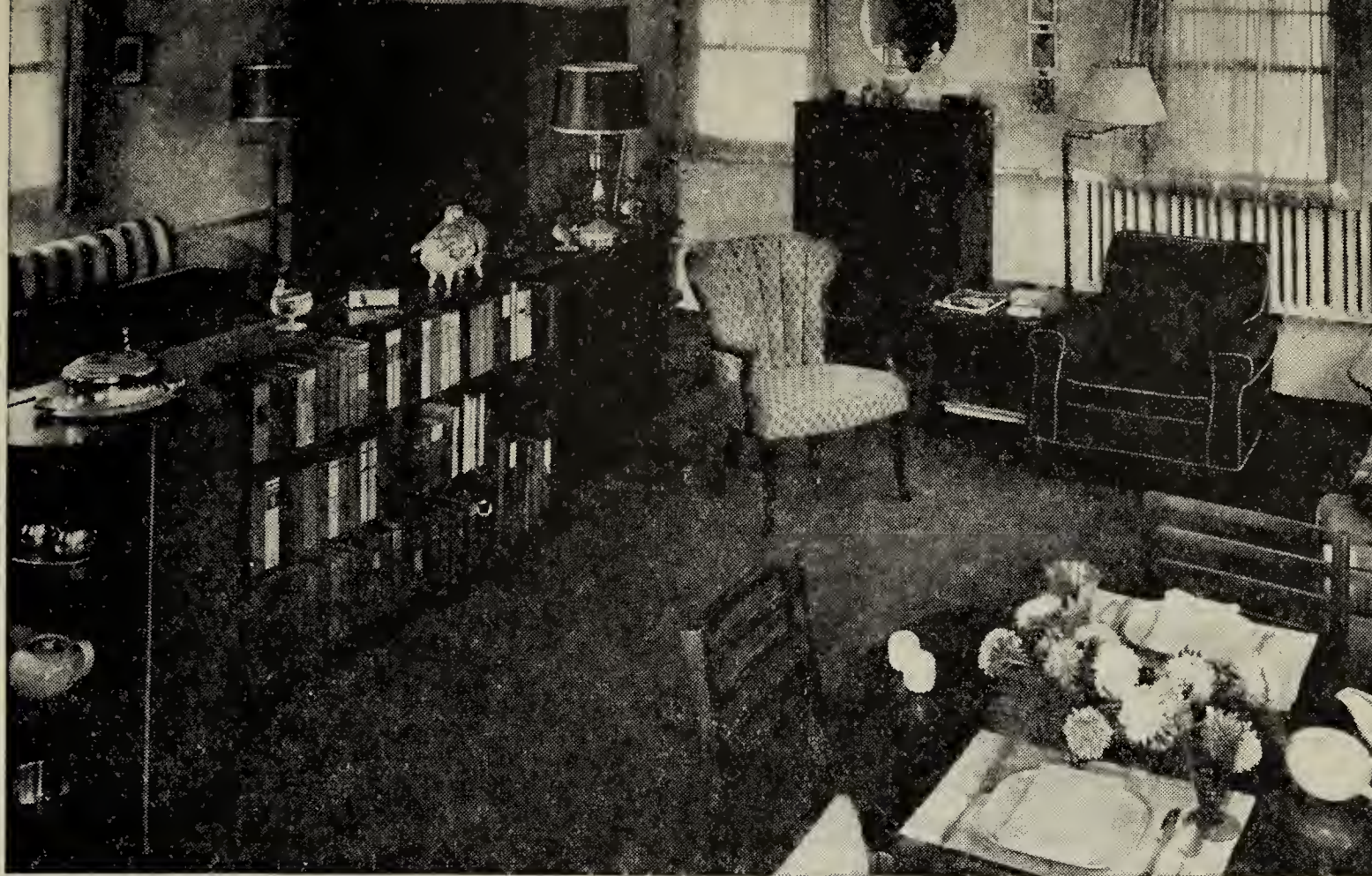


Ponderosa Pine Woodwork

Dining furniture scaled to little legs and bodies is popular with the younger set.

In some homes, the dining room has been turned into a multi-purpose room by equipping it for other activities besides eating. The series of illustrations shown on page 413 and in the frontispiece show how one dining room was transformed from a one-purpose room into a five-purpose living space. First, the dining table was moved against the wall to clear the floor space for other activities. Shelves were built on either side of the window, and furnishings were added to equip the room for study, sewing, music, and games. The frontispiece shows a lovely view of the room when the table has been laid for supper.

This type of reorganization is possible in many homes. With a little planning, many dining rooms can be made to contribute more efficiently to all-day living and to more pleasant family life. Often, the table, which generally occupies the middle of the room, can be pushed against the windows. This leaves space for other furniture and, at the same time, provides a more agreeable outlook at mealtimes. Everyone likes to eat by the window. It is the next best thing to eating out of doors.



Woman's Day

Top: This attractive one-room apartment was converted from an old garage.
Bottom: This one, from a lean-to shed.

A special eating place for little folks. The very young members of the family should not be forgotten when planning eating arrangements. They should have their own tables and chairs, convenient and comfortable for short legs and wiggly bodies. The nursery is an ideal spot for the very young members of the family to eat their meals. See the illustration on page 414. If this is not practical, a corner of the dining room can be adapted for this purpose.

Temporary living quarters can be attractive. During the housing shortage following World War II, many places which seemed most undesirable were converted into attractive living quarters. The pictures on page 415 show livable and charming one-room apartments converted from an old garage and a lean-to shed. The room shown in the upper picture was partitioned off with bookshelves and chest of drawers so as to separate the sleeping area from the living-dining room area. The kitchen unit was partitioned off with open shelves used for dishes and supplies. This arrangement created a feeling of separate rooms without diminishing the over-all effect of spaciousness.

The one-room apartment shown in the lower picture was secured by transforming an old lean-to shed on the back of a house. It provides sleeping, eating, and living quarters. In this case the dining table is set off from the living and sleeping end by wallboard partition.

CLASS ACTIVITIES

1. Discuss the importance of a pleasant place to eat. What effect might pleasant surroundings at mealtime have on family life?
2. What type of furnishing do you prefer? Compare your preferences in china, silver, and other dining-room equipment.
3. Collect pictures and samples of materials, and make a floor plan which will help you to describe your "dream room."
4. What reorganization or inexpensive new furnishings do you think might help your family dining room to be more attractive?

A SUMMARY OF YOUR STUDY OF YOUR EVERYDAY MEALS

Your study of this unit should have helped you to acquire information and skill with respect to six phases of everyday meals: menu-planning, preparation of a day's meals, setting the table, serving, table manners, and furnishing the dining room. Can you discuss any of the following topics for a period of three minutes?

Nutrition Facts

The balanced diet
Use of the seven basic food groups in
an adequate diet
Selection of food at a cafeteria
Food for toddlers
Food for older people
Liquid, soft, and light diets

Skills in meal preparation

Preparation of a day's food
Planning menus
Packing a box lunch
Sterilizing baby bottles
Setting the table
Serving a meal
Table manners

Selection of dining-room furnishings

General scheme of decoration
Silver
Dinnerware
Linens
Centerpieces
Furniture
Use of color
Space devoted to eating purposes

WHAT DO YOU KNOW ABOUT EVERYDAY FAMILY MEALS?

These tests will help you to test yourself on your understanding of the factors which contribute to healthful and pleasant family meals.

To test your knowledge of setting the table

Supply the missing words in the blank spaces below. On a separate sheet of paper write the number of each sentence, and opposite the number write the word that is missing in each case. **Do not write in this book.**

1. The _____ should be set at the tip of the knife.
2. Spoons are always placed to the _____ of the plate.
3. Napkins are generally placed at the _____ of the plate.
4. Bread-and-butter plates are placed at the tip of the _____.
5. A fork may be placed at _____ when no knife is used.
6. Soup spoons are placed on the _____.

To test your knowledge of an adequate diet

Which of the following menus for breakfast, luncheon, and dinner will provide a balanced diet? On a separate sheet of paper write the number of each pair of menus, and opposite the numbers write the letters (*a* or *b*) to indicate the correct answers. **Do not write in this book.**

NO. 1

(a) *Breakfast*

Hot cakes with Butter and Sirup
Cereal
Cocoa

NO. 2

(b) *Breakfast*

Grapefruit
Bacon and Eggs
Toast
Milk

(a) *Luncheon*

Jelly Sandwiches
Cake
Coca-Cola

(b) *Luncheon*

Peanut Butter Sandwiches
Apple and Celery Salad
Ice Cream
Milk

(a) *Dinner*

Macaroni and Cheese
Green Beans
Corn Muffins
Chocolate Pie

(b) *Dinner*

Tomato Juice Cocktail
Meat Loaf
Scalloped Potatoes
Tossed Green Salad
Pumpkin Pie

To test your ability to serve a meal

Some of the following statements are true and some are false. On a separate sheet of paper write the number of each sentence and the word "true" or "false" after it. **Do not write in this book.**

1. All foods should be served from the left.
2. In removing used dishes, it is best to pile the bread-and-butter plates, salad plates, and dinner plates in front of the guest and remove them with the left hand.
3. The waitress should never reach across the table in front of a person.
4. Water glasses should be lifted from the table and held behind the person while refilling them.
5. All dishes such as rolls should be offered by the waitress from the left.
6. All serving dishes should be left on the table during the dessert.

Do you know your manners?

Which is the best procedure in the following cases? On a separate sheet of paper write the number of each problem, and opposite the numbers write the letters (*a*, *b*, etc.) to indicate the correct answers. **Do not write in this book.**

1. When cutting a piece of roast beef, you should
 - (a) Cut a mouthful at a time.
 - (b) Cut it all in bite-size pieces.
 - (c) Cut two or three mouthfuls at a time.

2. To show your appreciation of a good meal, you should
 - (a) Scrape with a spoon.
 - (b) Smack your lips and exclaim frequently about the food.
 - (c) Eat your food and tell your hostess once how much you enjoyed it.
3. In eating soup, you should
 - (a) Drink it from your soup plate.
 - (b) Sip it from the end of your spoon.
 - (c) Sip it from the side of your spoon.
4. You should hold your knife and fork
 - (a) As you would hold a pencil.
 - (b) As you would hold a dagger.
 - (c) With the palm of your hand over the handle and the forefinger extended.
5. In putting mouthfuls of meat into your mouth you should use
 - (a) Your knife.
 - (b) Your fork with the tines turned up.
 - (c) Your spoon.

To test your knowledge of dining-room accessories

Each term in the first column is related in thought to a term in the second column. On a separate sheet of paper write the pairs of terms which belong together. **Do not write in this book.**

Table silver	More color
Table linens	Backgrounds
Centerpieces	Earthenware
Dinnerware	Plated
Modern table setting	Not too high
Crystal	Blown glass

REFERENCES FOR FURTHER READING

- Allen, Betty, and Briggs, M. P., *Behave Yourself!* J. B. Lippincott Company, 1945. Pp. 59-71.
- Boykin, Eleanor, *This Way Please!* The Macmillan Company, 1940. Pp. 156-191.
- Harris, F. L., and Henderson, R. A., *Foods*. D. C. Heath and Company, 1938. Pp. 256-274.
- Harris, J. W., and Speer, E. L., *Everyday Foods*. Houghton Mifflin Company, 1946 and 1941. Pp. 101-138.
- McLean, Beth Bailey, *Table Graces*. The Manual Arts Press, 1941.
- Silver, Fern, *Foods and Nutrition*. D. Appleton-Century and Company, Inc., 1941. Pp. 245-261.
- Trilling, M. B., and Williams, Florence, *Art in Home and Dress*. J. B. Lippincott Company, 1942. Pp. 169-192, 381-387.

9

The Meal That Gets Itself!

No meal really can get itself, but some are much more easily prepared and cleared away than others. Efficient management in the kitchen is the magic that produces good food with a minimum of time and effort. Then the homemaker must add another role to her repertoire. Besides acting as cook, dietician, buyer, and artist in dealing with the food problem, she must also be a good manager. There are many ways in which a thinking homemaker can make her work in the kitchen more speedy and enjoyable.

New and quicker ways of doing old and familiar tasks can add interest to the daily routine. Even dishwashing can become a fascinating problem in motion study. Meal preparation can become a game in saving time and labor. Even though you are not yet the chief homemaker directing affairs in your own kitchen, you can tackle your share of the kitchen jobs with the idea of finding smoother, faster, and more pleasant ways of working.

Kitchen efficiency involves several types of management problems. Scheduling various tasks so that they fit into a smoothly operating routine is an important part of kitchen efficiency. A second important phase of kitchen efficiency depends upon time- and labor-saving methods of doing each task. Slow and laborious ways of washing dishes and preparing food can greatly lengthen the time spent in the kitchen. A third point in maintaining kitchen efficiency is the convenient arrangement of kitchen equipment. Every article should be kept in the place where it is most quickly obtainable for the purpose. A fourth point in keeping kitchen activities at a high level of efficiency is the selection of labor-saving equipment.

1. Do you work the easy way?

What kind of worker are you in the kitchen? Do you do things the hard way, or can you make your head save your heels? Kitchen work is complicated because it involves so many different kinds of processes. Unless you learn how to do each separate job quickly and easily, you spend twice as long in the kitchen as necessary. Anyone who is willing to think about her cooking and dishwashing tasks can shorten her working hours and, at the same time, make her job more interesting.

Every motion counts. In manufacturing plants, motion study is used to find out how each worker can do his job more quickly and easily. Suppose a worker used three separate movements of his hands and arms to get his piece of work into the proper position for the machine to operate on it. If, by the rearrangement of his tools and materials, he can do the same thing with one movement, then his work is speeded up considerably. One small movement may not seem important, and counted by itself it is not. However, when the same movement is repeated several hundred times every day, it may be costly in time and money. Production rates in factories have been speeded up greatly by motion studies which have resulted in quicker work with less effort by the operators.

Motion study can be applied to kitchen work with very successful results. This type of work differs from factory work because the worker does not sit in front of a machine and repeat the same operation over and over again. Nevertheless, there are some jobs which can be fairly well standardized. For example, setting the table, clearing the table, dishwashing, and cleaning are similar processes at every meal. Let us see how these daily routine tasks can be speeded up through motion study.

Save motions when you set the table. Setting the table involves carrying several dishes, knives, forks, and other articles from their storage cabinets to the table. How many times do you go from the kitchen to the dining room when you set the table? Do you carry only one article each time, or do you fill both hands with articles which you know will be needed? How many times do you go back to the refrigerator or the buffet for something that you forgot on your first trip?

If the distance from the kitchen to the dining room is far enough to warrant it, use a tray or a serving table on wheels. Standardize your routine. Perhaps you will find it helpful to check your procedure according to the following routine.

1. Go to the buffet for the place mats, silver, napkins, salt and pepper, sugar, and hot-dish pads.
2. Go to the cabinet for plates, cups and saucers, and other dishes.
3. Go to the refrigerator for butter, cream, milk, and other cold foods.
4. Bring the serving dishes containing hot foods.

Experimentation has shown that sometimes five to ten minutes can be saved in this way at every meal. Five minutes at one meal preparation may not be important, but if five minutes is wasted at every meal for a week, the total time lost is 1 hour and 45 minutes. In addition to saving time, standardized routine gives one the satisfaction of a job easily and efficiently accomplished.

Save motions in dishwashing. Clearing the table and washing the dishes are sure to follow after every meal. This job, generally not very popular with either junior or senior homemakers, offers an excellent opportunity for motion study. Analyze your own method of working according to the following points.

1. How many trips from dining room to kitchen do you generally take in clearing the table after the meal is over? Could you reduce the number of trips by using a tray or by stacking the dishes?

2. Do you bring the dishes directly to the sink for scraping, rinsing, and stacking at the right of the dishpan? Or do you set each dish down anywhere you see an empty space, thus requiring a second handling for each dish before it is scraped, stacked, and ready to wash?

3. Do you start washing dishes before they are all scraped and stacked? This procedure will decrease your speed because you cannot work smoothly. It is always an advantage to put all the dishes of one size and shape into the pan at the same time. For example, a stack of plates in the dish pan can be washed and set into the dish rack more rapidly than dishes of several different sizes and shapes.

4. Do you stack the dirty dishes to the right or the left of the sink? If you are right-handed, you probably will find it more convenient to stack them to the right; if you are left-handed, to the left.

5. Do you rinse dishes with as little waste motion as possible? For example, do you rinse each dish separately by dipping it into a pan of hot water or by pouring hot water over it, or do you rinse a rack full of dishes at one time by spraying them with hot water from a hose attached to the faucet?

6. Do you dry dishes and put them away with no waste motion? For instance, as you dry the silver, do you lay knives, forks, and spoons

in separate piles so that, when you put them away, they are already sorted? Do you put each dish away as you dry it, or do you stack the dishes in orderly piles and carry several to the cupboard at one time?

Orderly habits save motions. Do you ever lose a spoon or other article while you are working in the kitchen and have to hunt for it? For example, you may frequently lose your hot-dish holder required for lifting hot things from the range. Each time you use it, you lay it down in a different spot. Then when you need it, you have to hunt for it until you find it behind the mixing bowl or under a cookie pan or on a chair, anywhere but where it should be. If you can form a habit of always laying it down in the same spot each time, you will save many lost motions. This does not mean that you should hang the holder in the place where it is kept each time, but merely lay it down in a convenient spot—the same spot every time. Follow the same practice with your paring knife, with the spoon for stirring, and other articles. Thus, you will avoid the irritation of playing hide-and-seek with your kitchen tools.

Be orderly in meal preparation. You can save yourself many lost motions and much confusion of mind by orderly habits as you work. Suppose you are making a cake. How does the kitchen look when you put the cake into the oven? Is every working surface littered with dirty pans, spoons, and containers of the various ingredients used? Will it take you half an hour to clear up the debris? Or do you put most things away as you work? For example, if you are standing at the counter near the sink as you mix the cake batter, do you drop the egg shells directly into the garbage container? Or do you drop them on the counter, thus making it necessary to pick them up later and also to wipe the counter? If the baking powder is kept on a shelf above the counter, do you take it down, measure out the required amount, and return the can to its place? Or do you take it down, measure out the required amount, and then leave the can on the counter where it is, without even replacing the cover? If only one ingredient were required for the cake, it would not much matter what you did with the can, but with several containers to take out and replace, it is time-consuming and confusing to handle each one unnecessarily. Of course, it is not wise to slow up the production of the cake by taking time out to put away each article, but many of them can be returned to their places as easily as putting them down in some other place.

How does the kitchen look after you have prepared a meal? Do you clear up the debris as you go? After you have pared the potatoes, do

you put the skins into the garbage container, or do you leave them to float around in the sink? Do you rinse off cooking dishes when you are through with them, or do you leave them to get sticky with dried food? Many dishes used in the meal preparation can be rinsed, dried, and returned to their storage cupboards. This greatly lightens the dishwashing job after the meal. How much less discouraging for the dishwasher to tackle the job when the kitchen is orderly, than when the sink and counters are piled high with debris. Do yourself a service, and keep your kitchen orderly as you work.

CLASS ACTIVITIES

1. Be prepared to give a two-minute talk on "The Kitchen Worker with Orderly Habits." Illustrate your points with examples of your own orderly methods of work.

2. Every dishwashing routine varies, depending upon the location of the eating space and the arrangement of the kitchen. Make a large floor plan of the arrangements in your own kitchen. Draw dotted lines showing the path of the dishes. Be prepared to explain why the routine is good.

3. List several ways in which you have learned to save motions while working with food. Remember that no motion is too small to be worth saving.

4. Explain the relation between fatigue and disorderly work habits.

5. How can you save motion and energy in the following cases?

(a) In filling water glasses.

(b) When putting foods into serving dishes.

(c) In washing cooking dishes used for cereals, mashed potatoes, scrambled eggs, and similar foods which stick to the pan.

(d) In removing food from used plates.

2. Simplify your work routine

With a little preliminary planning, meal preparation and clearing-away processes can be greatly simplified. Meals need be no less nourishing or attractive because they are planned for a minimum of time and effort. The homemaker-manager who treats her kitchen work as a simplification problem adds considerable interest and pleasure to her work.

Plan menus for easy preparation. Our previous study has shown us that much of the food problem in the home is "brain work." Planning menus for balanced diet, for combinations of good flavors, for attrac-

tive appearance, for special dishes for special people, and for speedy preparations requires pencil and paper. Many modern kitchens provide a convenient place where the homemaker-manager can do her "paper work." The kitchen planning center shown in the illustration on this page is handy and pleasant for studying recipes, planning menus, and keeping a food budget.

Wherever the homemaker-manager does her planning, she should always try to plan menus which are easily prepared.

1. Avoid menus which require too many "last minute" operations. For example, a menu that requires broiling the chops, mashing the potatoes, making the white sauce for creamed peas, and making another sauce for gingerbread dessert is difficult because so many things should be done at the last minute and because so many different cooking dishes are used.

2. Use only one "made dish" when time is short. That is, plan for only one dish which requires much preparation. Stew or an oven casserole can provide a main dish which includes several of the basic food groups. The quick salmon pie shown in the illustration on page 351 contains, besides the salmon, milk, cheese, peas, and the topping of biscuits—or four of the basic food groups. A cabbage and carrot cole slaw, whole-wheat bread and butter, an ice cream dessert, and a beverage furnish foods from the other basic seven, and, at the same time, give a tasty and attractive meal. In this case the "made dish" requires 20 minutes in the oven. During the time while it is baking, the other dishes can be prepared and the table set. Allowing 15 minutes for the preparation of the dish, the total preparation time for the meal should not exceed 35 minutes. Of course, this does not count the preliminary "brain work" which resulted in a quick and attractive meal. Make your head save time and effort for you.

Time-plan your meals. Experienced cooks can carry time schedules for meal preparations in their heads, but it is a good idea for beginners



Peoples Gas Light and Coke Company

Many modern kitchens include a planning center.



Langley High School, Pittsburgh Public Schools

Preliminary planning will solve many of the homemaker's problems.

to make their time schedules on paper. A time schedule, such as the one given below, is especially valuable for beginners at food preparation. Efficient homemakers who have become proficient at producing three meals a day, punctually, do not need to write down a time-plan for each meal, because they have learned how to proceed according to time-plans which they carry in their heads. However, the most experienced homemaker finds it helpful to write down her schedule of work for special occasions, such as Christmas dinner or big parties.

The girls in the picture at the left are planning a menu and time schedule of preparation for a breakfast party in the school homemaking rooms.

Menu

Orange juice
Cooked cereal
Bacon and eggs
Buttered toast
Coffee
Milk

Preparation schedule

7:10 A.M. Put on water for cereal.
Start coffee in percolator.
7:15 A.M. Add cereal to boiling water.
Squeeze orange juice.
Put on bacon to pan-broil.
7:20 A.M. Set table.
Remove bacon from skillet.
7:25 A.M. Start frying eggs.
Make toast.
7:30 A.M. Serve breakfast.

Similar time schedules for the preparation of dinners and luncheons are helpful in making the work go smoothly. If the correct time for beginning the preparation of each food is scheduled, there is no danger that one dish will not be ready when it is time to serve the meal.

Plan meal preparations to fit your time. Menus should be planned according to the amount of time one has and when the time is available. Suppose that Saturday night supper is your responsibility. The



Kellogg Company

A dinner menu including spaghetti and meat balls, grated cheese, and a fresh vegetable salad provides a hearty and satisfying meal requiring a minimum amount of preparation.

family expects to sit down at the table at 5:45 P.M. On Saturdays when you are home all day, you can start the dinner preparation as early as necessary. In this case you might choose either of the menus below. Both of these dinners require long cooking periods.

No. 1

Tomato Juice Cocktail
Swiss Steak
Baked Potatoes
Fresh Green Beans
Corn Bread
Cole Slaw
Apple Pie
Beverage

No. 2

Fresh Fruit Cup
Pot Roast
Potatoes and Carrots
cooked with Meat
Baking Powder Biscuits
Green Salad
Boston Cream Pie
Beverage

However, it may be that on some Saturday afternoons you will wish to go out, perhaps to a movie or a club meeting. In this case you may not be back until five o'clock, so you must plan a meal which can be prepared quickly. If you are at home during the morning, you might remodel the menus given above to fit your time.

No. 3

Tomato Juice Cocktail
 Swiss Steak (cooked in morning)
 Mashed Potatoes
 Canned Green Beans
 Enriched White Bread
 Gelatin Fruit Salad (prepared in morning)
 Apple Pie (baked in morning)

No. 4

Fruit Juice (canned)
 Beef Stew with Carrots, Peas, and Potatoes (cooked in morning)
 Whole-wheat Bread
 Green Salad
 Cup Cakes (baked in morning)

If it should happen that you have not time for the dinner preparation either in the morning or the afternoon, then you must plan a menu that can be prepared quickly. In this case, you will be wise to plan only one "made dish," such as Shepherd's pie (page 343) or other foods which require very little preparation. Hamburger patties, chops, steaks, and eggs are good selections for quick dinners. The menus given below can be quickly prepared when there is no opportunity for preliminary preparation.

No. 5

Hamburger Patties
 Parsley Buttered Potatoes
 Spinach
 Raw Vegetable Salad
 Rye Bread
 Cantaloupe à la mode
 Beverage

No. 6

Lamb Chops
 Mashed Potatoes
 Green Peas (canned)
 Apple and Raisin Salad
 Sweet Rolls (baker's)
 Fruit Cup and Cookies
 Beverage

Oven meals are easy. Convenience and economy are accomplished when all the cooked foods for a meal are baked at the same time in the oven. Controlled oven heat cooks the food evenly and makes it unnecessary to watch the pots on top of the range to see if they are boiling dry. Since all the foods are cooked with the same heat, the oven meal is economical of fuel.

Oven dinners should be planned so that all the foods can be baked at the same temperature. If some of the foods require longer cooking periods than others, they can be put into the oven at the proper time, but one should not attempt to cook foods which require high temperatures and others which require low temperatures for the same meal.

OVEN MEAL NO. 1

(Temperature 300 F.)
 Rolled Beef Roast
 Franconia Potatoes
 Stuffed Peppers
 Bread Pudding

OVEN MEAL NO. 2

(Temperature 375 F.)
 Broiled Lamb Chops
 Scalloped Potatoes
 Corn Bread
 Apple Crisp

Elimination of tasks helps to simplify kitchen work. Often, it is possible to lighten meal preparation and clearing-up operations by eliminating many processes which are not truly essential. Most of these unnecessary things are done because they are customary and no one has thought of doing without them. Some of them take only a few seconds of time; others require longer periods. Even a few seconds are worth saving, if we can do so without lowering the quality of the food which we prepare or without sacrificing our high standards of cleanliness. Following are some suggestions for eliminating kitchen tasks. Every kitchen worker, who is alert to her job, will find other ways of by-passing nonessential jobs.

1. Instead of drying each dish with towels, spray the dishes with scalding hot water and allow them to air-dry. They will be cleaner than if dried with towels.

2. Eliminate dishes by not using them. Instead of two or three serving dishes, use one for two or more foods. Serve the plates from the kitchen when desirable. Broil or bake foods in the dishes which can be used on the table. The picture on page 104 shows Danish apple dessert in a glass baking dish which can be served at the table.

3. Eliminate work by choosing the type of recipe requiring the least effort. Instead of rolled and cut biscuits, make drop biscuits or cut them in squares with a knife. Instead of rolled cookies, make drop or refrigerator cookies. Instead of apple pie, serve baked apples. Instead of shortcake or cobbler, serve plain fruit. Of course, one does not always wish to choose the simpler dish, but emergency biscuits or a plain dish of berries is very good.

4. Serve fewer foods and larger portions. Instead of having two vegetables and a salad for every dinner, omit one vegetable or the salad, being careful to maintain a balanced diet. Sometimes, it is a good idea to omit the dessert.



General Electric Company

An oven meal such as this generally requires one to two hours.

CLASS PROJECT: PLAN AND PREPARE A DAY'S MEALS. USE TIME SCHEDULES FOR THEIR PREPARATION, ALLOWING 20 MINUTES FOR BREAKFAST, 30 MINUTES FOR LUNCH, AND 1 HOUR FOR DINNER.

1. Plan a breakfast, a lunch, and a dinner which provide the following: a balanced diet for the day, a good combination of flavors, and an attractive appearance.

2. Make a preparation schedule for each meal as it would be used at home.

3. Make a time schedule which will fit your class periods. If you have short periods, it probably will be necessary to use more than one period for preparing and serving each meal.

4. Each group may work as a unit, or the whole class may work as one unit, depending upon time and available supplies.

5. After the meals have been prepared and served, hold an after-dinner conference and discuss the success of the project. Do not forget to include a discussion of serving and manners.

5. Use more raw vegetables and fruits in salads and desserts. Raw fruit and nuts which are cracked at the table make a good dessert, or raw fruit, cheese and crackers may please the appetite.

6. Occasionally cook double portions so as to have leftovers for the next meal. Leftover stew can become meat and vegetable pie; leftover boiled or baked potatoes can be used for hash-browned potatoes.

7. Paper towels are especially useful in wiping up spilled food which stains the dishcloth and in removing grease from a skillet. Pour off the grease while still warm and then wipe the pan with paper toweling or other soft paper, and throw it in the garbage. This eliminates the danger of clogging the sink with grease. Of course, you will save all desirable fats by straining them and storing them in the refrigerator.

8. Eliminate dirty cooking dishes by not using more than necessary. When you are making cake or biscuits requiring shortening, measure the flour first, use the same cup for the fat, and then for the liquid, molasses, honey, or corn sirup. The greased sides of the cup prevent the sticky sirups from adhering to the cup.

If you are making a fluffy omelet or other dish requiring the egg whites and yolks to be beaten separately, be sure to beat the whites first. The egg beater can then be used for the yolks without first washing it.

Use short cuts whenever possible. The alert homemaker-manager welcomes new and quick methods of doing the old, familiar jobs.



Armour and Company

Meat loaf and green beans make an excellent main dish easily prepared within an hour.

Often, she invents some short-cut method of her own. Here are a few suggestions for quick ways of doing everyday jobs.

1. Mix the white sauce or gravy in a glass jar as described on page 74.

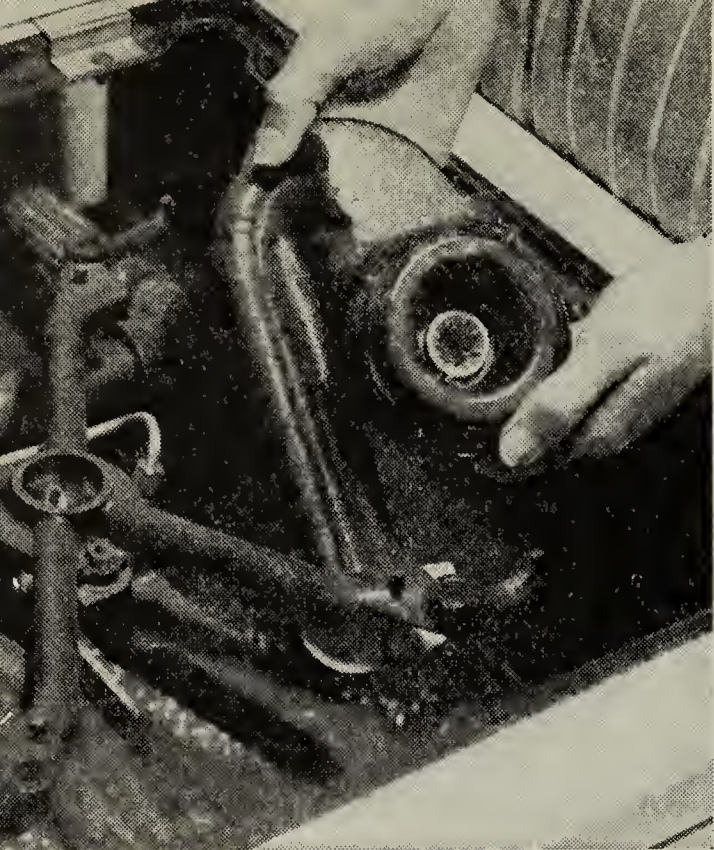
2. When mincing parsley or green pepper, use a pair of scissors instead of doing it laboriously with a knife. Scissors can also be used more quickly and easily than a knife in trimming the edge of a pie crust.

3. When flouring foods, such as small fillets of fish or chunks of meat, put the flour and the pieces of food into a paper bag and shake vigorously.

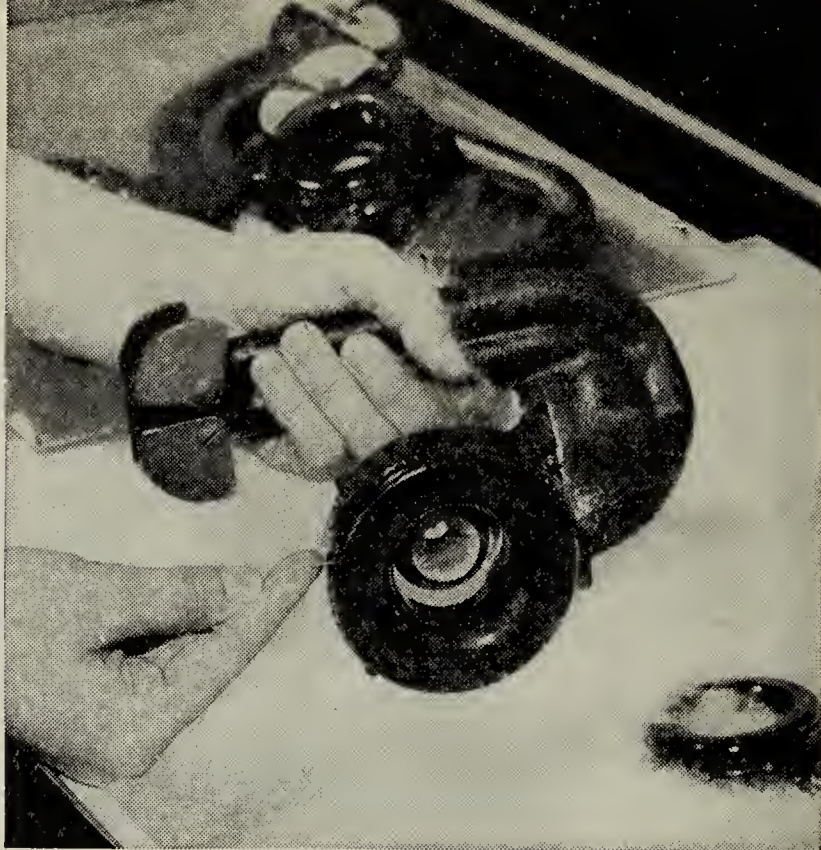
4. Use prepared mixes if the price is not prohibitive and if the resulting product is good.

5. Keep a pair of pliers with adjustable jaws in the kitchen for use in unscrewing lids to sirup or vinegar bottles, and for lifting vacuum seal lids from jars of home-canned fruits and vegetables.

6. Use an electric fan to speed the drying of laundry.



Lift out the surface burners for thorough washing.



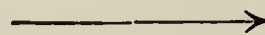
Wash the burners and clear the clogged openings with a fine wire.



Use a brush to clean inside the burner tubes and air shutters.

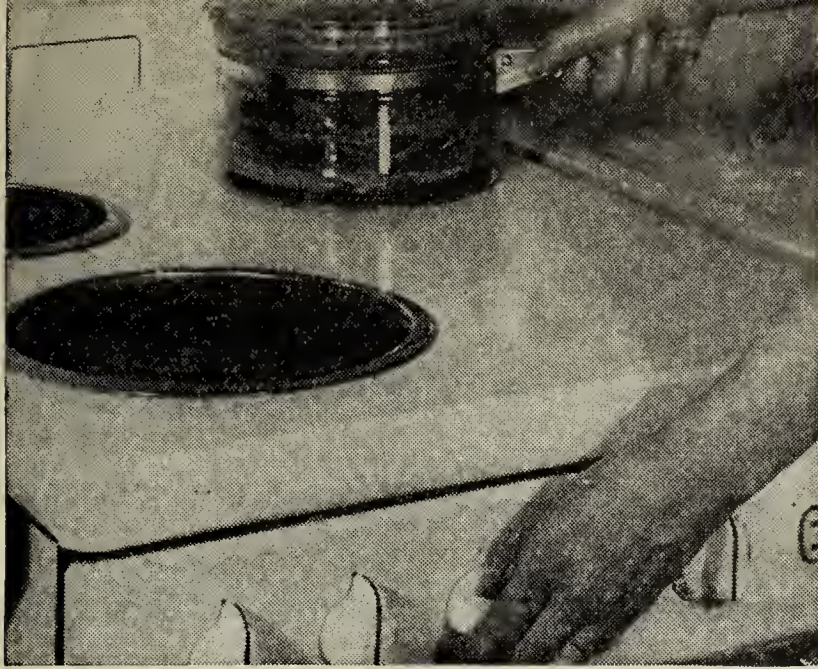
If it is a gas range, keep the burners clean.

If it is an electric range, guard those heating wires.



**YOUR COOKING RANGE:
FAMILY MEALS DEPEND ON IT**

Bureau of Human Nutrition and Home Economics



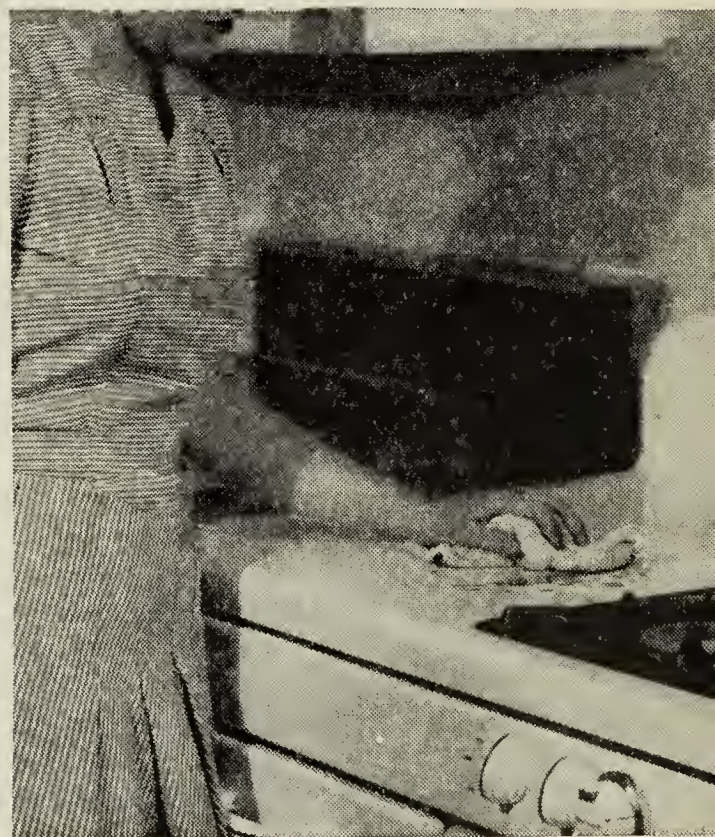
To save wires and current:

Top left: Don't spill food on open unit; use pans to fit unit; switch to lower heat when food starts to cook. *Top right:* Let spilled foods char on open units, cool, and brush off; beware damaging wires with sharp tools or touching live wire with metal. *Right:* Wipe enclosed unit with damp cloth.



Whether it is gas or electric, save the surface.

Left: Wipe up spills promptly with dry cloth or paper (acid foods may eat into the surface). *Right:* Clean both the inside and outside. For stubborn spots, use finely powdered cleanser like whiting. Wipe daily.



Management of housekeeping problems. Numerous housekeeping tasks in the dining room and kitchen should be included in our discussion of work simplification. Cleaning the refrigerator, range, and cupboards, dusting and polishing the dining room furniture, laundering dish towels and table linens, and general cleaning of the floors and walls should be managed so as to require as little time and effort as possible.

A schedule for these jobs is helpful. When they are done at regular intervals, the work goes more smoothly. If such tasks as cleaning the breadbox, refrigerator, and other pieces of equipment are done only when one happens to notice that they need it, the work is not likely to go smoothly. Suppose you suddenly realize that your refrigerator needs cleaning. You are expecting company and had planned to use your time in the preparation of a special dinner, but you feel that the refrigerator must have attention at once. So you crowd another job into the busy day. Having cleaned the refrigerator, you may find that the range and breadbox also need attention. Soon your day is a wild confusion of hurried cleaning and cooking. A regular schedule for housecleaning jobs will prevent such upsetting occurrences.

Some cleaning tasks should be performed daily; others need be done only weekly; and others can be done at longer intervals. A schedule for the regular performance of these tasks helps the work routine to run smoothly and efficiently. The type of place where you live will determine the frequency with which some cleaning jobs must be done.

SCHEDULE FOR HOUSEKEEPING JOBS IN KITCHEN AND DINING ROOM

<i>Every day</i>	<i>Every week</i>	<i>Occasional</i>
Clean sink	Clean refrigerator	Clean cupboards
Wipe off tops of range counters, and table	Defrost mechanical re- frigerator	Put clean papers on shelves
Sweep or use dry mop on floors	Do light cleaning of range	Wash kitchen furni- ture
Empty kitchen waste basket	Scrub kitchen floor	Wash kitchen walls
Wash tea towels or get out clean ones	Clean breadbox	Polish dining-room furniture
Dust and put dining room in order	Dust and do other general cleaning	Polish dining-room floor
	Launder tea towels and table linens	Clean range thor- oughly
	Polish top of dining table	

In some places the floor must be scrubbed every week, in others at much longer intervals. Each homemaker-manager will decide for herself how often a cleaning task is required. The schedule on the opposite page is given as an example, but it may not fit your particular situation.

The housekeeping job can be simplified somewhat by the elimination of tasks. Paper napkins and plastic mats make the weekly washing and ironing of tablecloths and napkins unnecessary. Paper toweling can take the place of a kitchen hand towel. Care in using the oven and top of the range eliminates difficult cleaning. Avoid dishes in the oven that run over and kettles that boil over onto the burners. Avoid putting into the refrigerator anything that spills easily. Keep cupboard doors closed when not in use so that dust cannot settle upon the shelves and their contents. Avoid dripping hands and dripping utensils from sink to table. Water spots can quickly become dirty spots.

CLASS ACTIVITIES

1. Plan menus to fit the following requirements: breakfast in 15 minutes; luncheon in 30 minutes; dinner in 1 hour.
2. Describe a meal which was served late because of failure to time-plan it.
3. Report any short-cut or elimination methods which are used in your home kitchen.
4. Discuss the desirability of leaving the dishes to be done at a later time. Under what conditions might it be satisfactory? Unsatisfactory?
5. Make a schedule for housecleaning jobs in your own kitchen which you think would be workable.
6. Discuss the best methods of laundering dining-room and kitchen linens.

FUN WITH FOOD AT HOME

1. Conduct a motion-study investigation of dishwashing. Your report should include the general routine used, the time required for different routines, and your conclusions about speedy work.
2. Report any successful methods of saving time and effort which you have discovered in connection with food activities.
3. Prepare a time-planned meal for your family.

3. Good arrangement speeds the meal

The importance of convenient arrangements of equipment for quick and easy meal preparation can hardly be overestimated. A kitchen where every utensil and tool is readily at hand invites one to enjoy



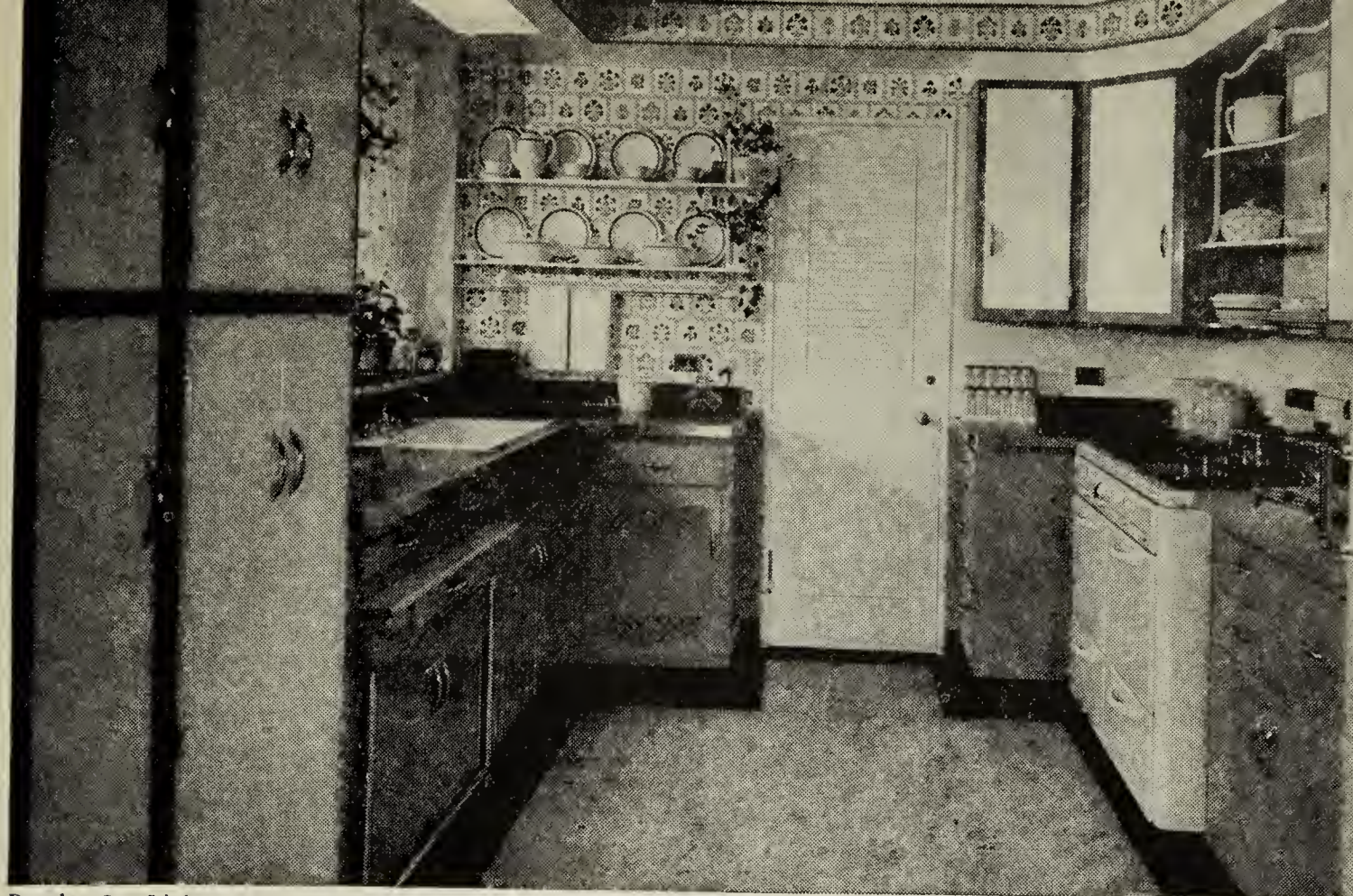
Peoples Gas Light and Coke Company

The sink center in this kitchen is planned for convenience and beauty.



Duquesne Light Company

This all-electric kitchen provides the most modern electric conveniences—dish-washer, toaster, coffee maker, range, and refrigerator.



Peoples Gas Light and Coke Company

Extra table space for serving is provided in this kitchen by a pull-out table.



Peoples Gas Light and Coke Company

The three work centers at the range, sink, and counter are conveniently located with relation to each other in this kitchen.

its facilities. When every piece of kitchen furnishing is located with reference to its availability for instant use, work goes rapidly and pleasantly.

Work centers in the kitchen. The two chief activities carried on in the kitchen are food preparation and clearing away afterward. These operations can be broken down into activities at the sink, at the range, and at the mixing table or counter.

The sink functions as a center both for dishwashing and for some types of food preparation. All the utensils and tools which are used first with water should be stored in cabinets near at hand. The dishpan (if one is required), the soaps, the cleansing powders, the scouring pads, the dishcloth and towels, and the drying rack should be within easy arm's reach. The worker should not have to take a single step away from the sink to procure these tools. Plenty of storage space for these articles is available near the sink in the upper picture on page 436. The open-grill work in the doors beneath the sink provide an excellent drying cupboard for dish towels and dishcloth. Note that this sink is well lighted both by day and by night. The wide windows extending around the corner of the room provide pleasant daytime illumination.

Food preparation started at the sink includes peeling, cutting up fruits and vegetables, making coffee, and cooking cereal. Paring knives, saucepans, and coffeemaker should be easily available. Note the board for cutting up vegetables on the drainboard in this kitchen. Another larger board can be drawn out from underneath the drainboard.

Other pieces of equipment which should be located at the sink center are a garbage container, a colander or strainer for use in holding peelings and catching debris rinsed from plates, a measuring cup, and sieves. The sink center in the bottom picture on page 436 is planned for every member of the family of dishwashing age. The electric washer is there to speed after-the-meal cleanup activities.

The range is a center for those tools which are used first at that place. This includes frying pans, a griddle, covers for pans, a long-handled fork and spoon, a pancake turner, and salt and pepper shakers. Modern ranges contain drawer space in which some of these pieces of equipment can be stored. A drawer in a nearby cabinet can store other pieces. Study the range center in the upper picture on page 436. Note the special built-in light on the underside of the hanging cabinet over the range. This type of illumination is called soffit lighting.

The mixing center consists of a table or counter where many types of "made dishes" are assembled. The preparation of cakes, pies, salads,

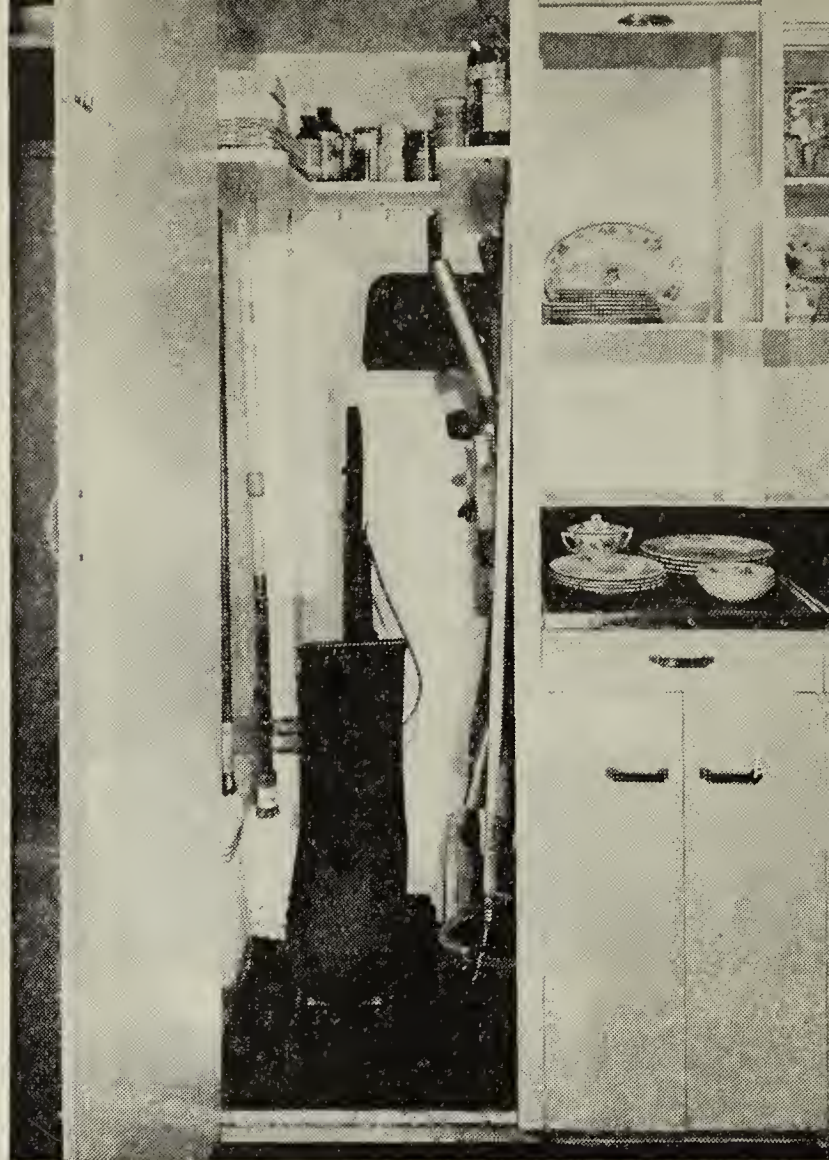
puddings, and other foods requires several ingredients, tools, and utensils which should be kept in convenient places. This center should include a cabinet above the counter for measuring cups and spoons and for ingredients such as baking powder, spices, and vinegar. Drawers should hold spoons, knives, forks, and similar tools. Containers for flour, sugar, salt, and other ingredients should be handy inside the lower cabinet. This center is ideally located between the refrigerator and the sink as shown in the upper picture on page 436. Another illustration of a good mixing center between the refrigerator and sink is shown on page 11.

A serving center is a desirable feature in many kitchens, especially when a large number of people are served at meals. On this counter, beverage glasses may be set out upon a tray and filled, salad plates arranged, serving dishes filled, and desserts made ready for serving. In many kitchens the mixing center is also used as a serving center. In larger kitchens where there is more counter space, it is helpful to establish a serving center convenient to the dining-room door. Trays, glasses, dishes, toasters, and other electrical equipment should be located at this center. If the mixing center is also used for serving, these pieces of equipment should be near at hand.

Extra space for serving is provided in some kitchens by a drop-leaf table attached to the wall or by a pull-out table such as that shown in the upper picture on page 437.

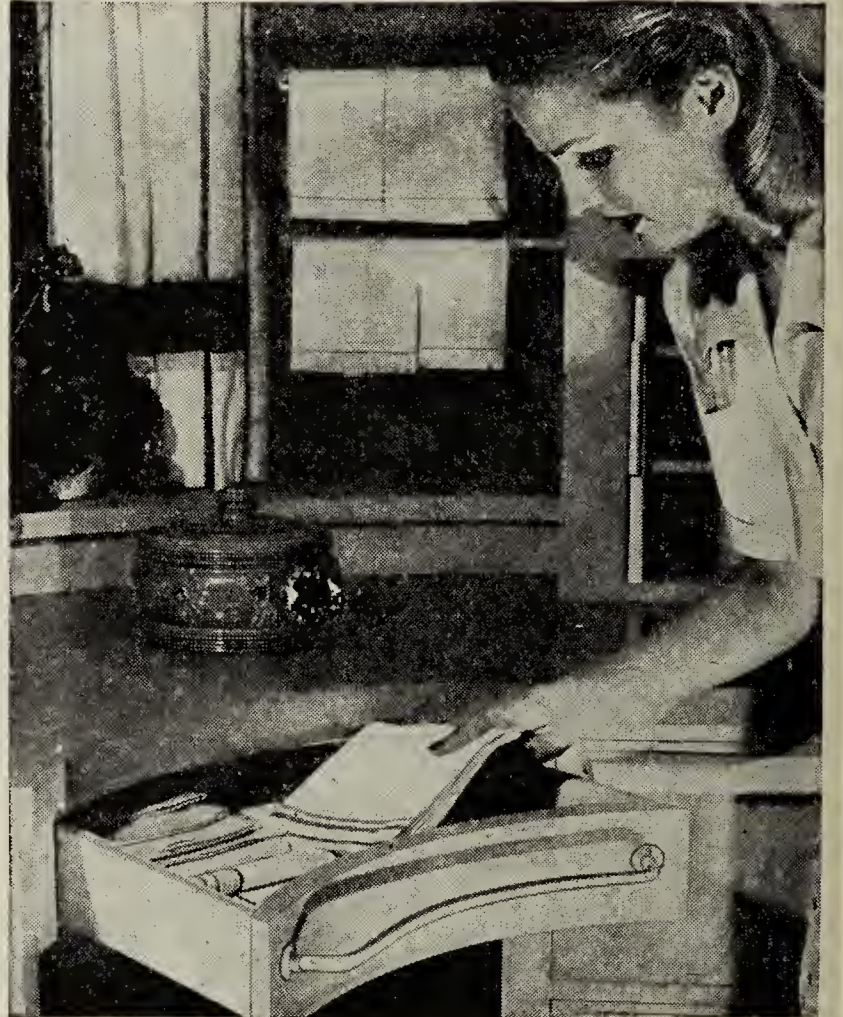
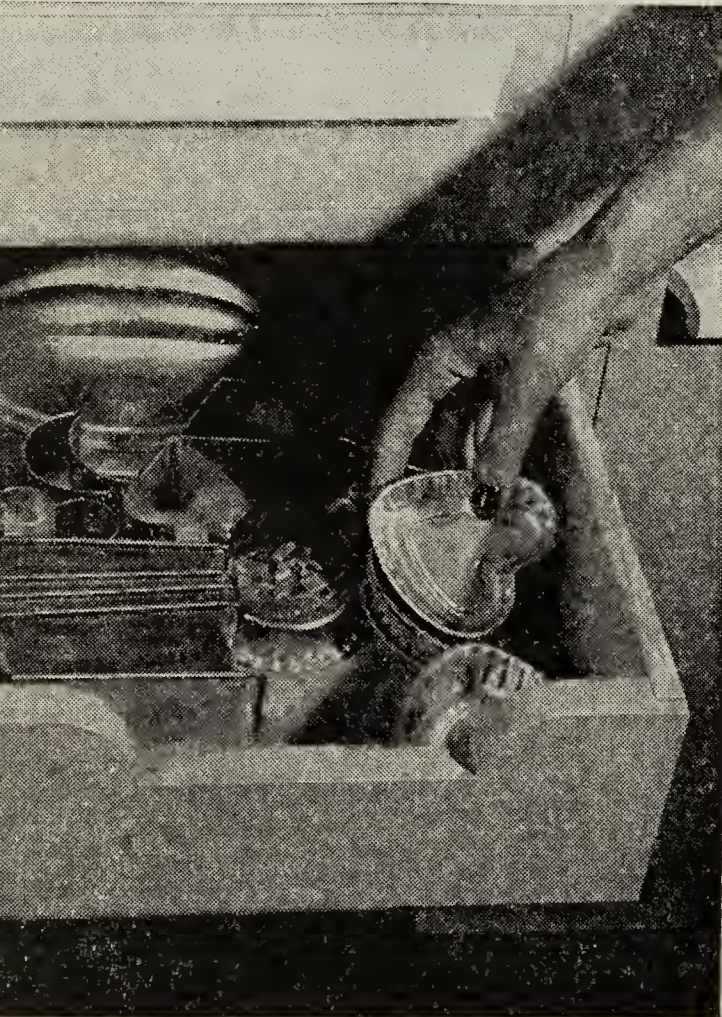
The cleaning center frequently is located in the kitchen, although it may be in the utility room. A convenient cabinet for storing broom, mops, vacuum cleaner, polishes, and other cleaning equipment is shown in the above illustration.

Inside the drawers and cupboards. Convenient arrangements should not stop with planning the work centers. Many small articles stuffed into drawers and cupboards in helter-skelter fashion can cut down one's



Good Housekeeping Institute

An adequate storage cabinet for cleaning equipment is a great convenience.

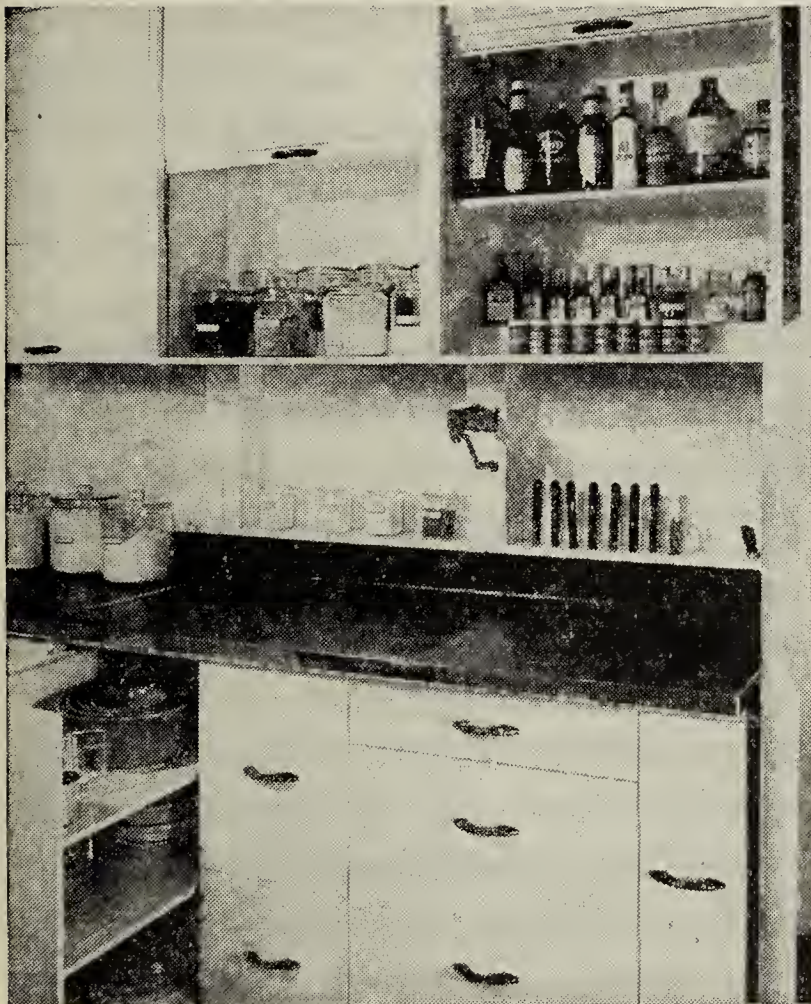
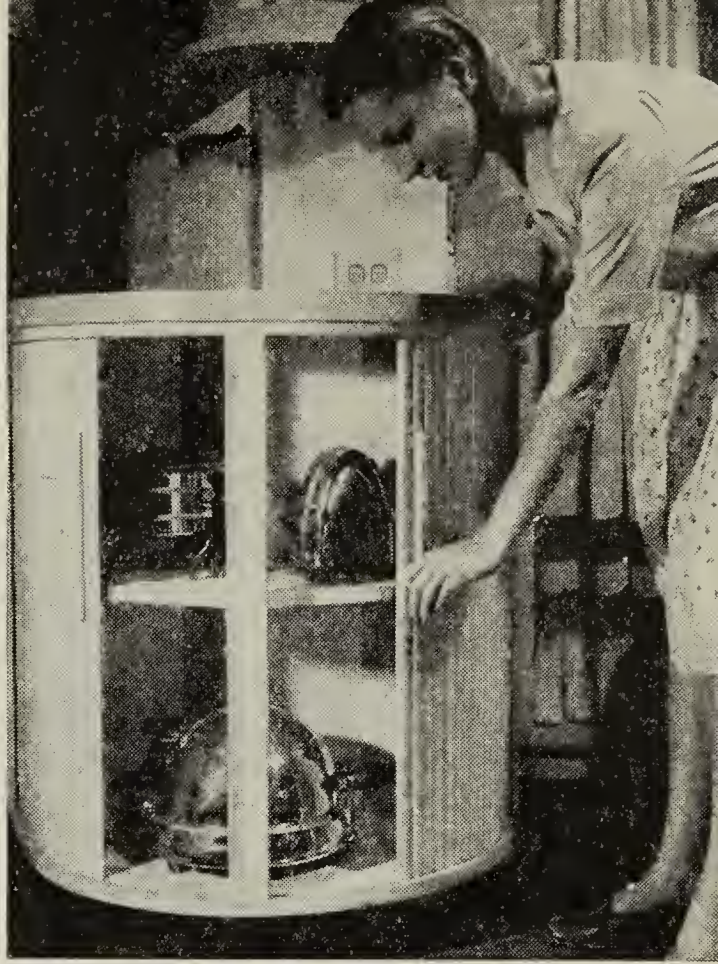


Better Homes and Gardens Magazine

Planned use of drawers and cupboards in the kitchen adds to efficiency.



Better Homes and Gardens Magazine



Good Housekeeping Institute



Supplies and equipment in pantry and kitchen should be easily available.

rate of work considerably. Have you ever tried to take a spoon, an egg beater, or a cake tin from its storage place in a hurry and been forced to disentangle it from other articles before obtaining it? These small hindrances always interfere with smooth, speedy work and are particularly annoying when one is in a hurry.

Planned arrangements inside the kitchen drawers and cupboards can eliminate such obstacles. Partitions, hooks, and grooves will keep your small equipment in good order and ready for instant use. The two upper pictures on page 440 show how drawers and cupboards can be arranged to simplify the storage problem. In the picture of the cupboard (top left), hooks on the inside of the cabinet door hold the frying pans. Notches cut into the edge of the shelf hold pancake turners and other long-handled tools so that they are easily available. As shown in the picture of the drawers (top right), partitions keep the spoons, knives, and other tools in order. In the knife section, grooves cut to fit the blades and handles keep each knife safe and in good condition. This arrangement is really a safety precaution, because sharp knives entangled with other articles in the drawer may cause a bad cut as one fumbles for a tool. This arrangement also keeps the cutting edges in better condition than if the knives are allowed to become dulled by bumping against other articles.

Odd-shaped articles, such as cooky cutters and gelatine molds, can be kept conveniently in pull-out shelves or trays as shown in the lower left picture on page 440. The drawer which holds such objects is sometimes called a "scramble drawer," but it should not be allowed to become too well scrambled by keeping too many articles in it. Towels should be laid into a drawer in such a way that any towel can be extracted without upsetting the whole pile. See the lower right picture on page 440. A little care in putting towels or other linens into a drawer means easy access to them later. A shallow drawer is most convenient.

Convenient types of shelves, drawers, and doors. Just as clothes are made to fit the man, so are kitchen cabinets now made to fit their contents. New styles of drawers, shelves, doors, and cupboards are planned to fit kitchen equipment. The top pictures on page 441 show storage cupboards, one for utensils and grocery items and the other for electrical equipment. In one picture we see a small pantry with full-length doors and U-shaped shelves. When one opens the doors, everything is within easy reach. A step slides out from under the shelf, providing easy access to the upper shelves. Notice the small shelf trays on the doors which hold small articles.

In the picture on the top right, another type of cabinet shows under-counter storage space well adapted to electrical equipment. When desired, any piece of equipment can be set on the counter above and plugged in at the conveniently located sockets. The tambour-type doors, borrowed from old-style rolltop desks, are much more convenient than the usual, awkward swinging doors which may block the traffic.

Several convenient arrangements are shown in the lower left picture on page 441. Beginning at the top, note the set-back shelves which make it easy to reach the articles at the back. Below this cabinet are a stationary can opener, a slotted receptacle for knives and scissors, and a retractable electric cord. This arrangement for keeping knives is another excellent way of guarding against accidents and dulled edges. Under the counter at the left is a new type vertical drawer which pulls out, bringing the shelves within easy reach. The picture at the lower right on page 441 shows a drawer equipped with hooks for odd-shaped pieces of equipment.

The cabinet shown in the picture on this page provides easy access to many other pieces of kitchen equipment. The upper cupboard is shallow, being just deep enough from front to back to hold the skillets and saucepans. Doors which slide up and down are especially convenient and prevent the danger of bumping one's head on a swinging door. Below the counter are traylike sliding shelves which bring the farthestmost article within easy reach. The vertical partitions at the right are an excellent help in storing trays, platters, cake tins, and similar equipment. Such arrangements as these save numberless motions and considerable time, besides eliminating the irritation of struggling for half-hidden, inaccessible articles.



Good Housekeeping Institute

The filing arrangement for trays, platters, cake tins and lids, is a feature in this cabinet.

Types of kitchen plans. There are three general types of kitchen plans: the "U" plan, the "L" plan, and the corridor plan. The kitchen shown in the lower picture on page 437 is a good example of the "U" kitchen. This plan gets its name from the way in which the equipment is arranged around three sides of the room, forming the shape of the letter U. The tops of the sink, counters, and range form a continuous U-shaped working surface. Some kitchen experts believe that this type of arrangement is best because the worker has easy access to each work center by taking very few steps. Notice the splendid arrangement for lighting shown in this room. A large corner window lights two sides of the "U" in the daytime, and a built-in ceiling light or soffit lights it by night. The range center on the other side of the "U" is lighted by a modern pattern glass window admitting daylight from the dining room, and it is lighted by a soffit light after dark.

A U-shaped working area is possible only in a kitchen with three wall spaces unbroken by doorways. In some kitchens, doorways on two walls interfere with the placement of kitchen furniture. In this case, the working area is best arranged in an L-shape. The work centers are handy to each other, and the worker is not disturbed by members of the family walking through the room.

The corridor-type kitchen is preferred by many women because of its long, narrow shape. As shown in the upper picture on page 437, the furniture is arranged on either side of the kitchen. The back door is located in the middle of one wall, and the dining-room door is at the opposite end. In kitchens where the traffic is not heavy, this arrangement is as convenient as in the U-shaped plan. In this kitchen note the convenient counters near the back door for receiving supplies.

The built-in furniture for modern kitchens can be secured in sizes and shapes to fit any kitchen. If you are refurnishing an old kitchen, you will have to use the plan which is adapted to the position of the doors and windows. However, if you have the opportunity to plan the kitchen in a new house, you can locate the doors and windows to suit the plan which you prefer.

Height of working surfaces. For comfortable work, the tops of the tables, the counters, the sink, and the range must be the right height. The worker should not have to stoop when she is washing dishes or mixing a cake. In earlier days, sinks and tables were much too low for comfortable work by any except very short people. The height of the working surface should vary with the individual who uses it. A good,

average height for counters, ranges, and the rim of the sink is 35 to 35 inches. For a worker seated in an ordinary chair, the height of the working surface should be 25 inches.

Room for knees and toes. Well-designed kitchen furniture allows room for knees and toes. It is very fatiguing and uncomfortable to stand at a sink or counter where one's toes do not have room to extend under the edge of the cabinet. All correctly designed kitchen furniture allows ample toe room. If the worker expects to sit at a working surface, there should be comfortable knee room. The sink shown in the upper illustration on page 436 is designed so as to allow room for a worker who wishes to sit.

CLASS ACTIVITIES

1. Make a list of articles which should be located at the sink center, the range center, the mixing center, the serving center, and the cleaning center. Make these lists as though we were planning your own kitchen. Be practical and economical.

2. What small articles should be duplicated at more than one center for convenient arrangement?

3. Make a diagram of the front view of a cupboard which you know. Make a second diagram showing how you would remodel it for better arrangement.

4. Could the cupboards in the school laboratory be improved by adding partitions or dividers in drawers or by adding steps to the shelves?

5. Discuss the convenience of deep and shallow drawers. Compare the convenience of shelves far enough apart to allow for stacking deep piles of dishes and shelves not so far apart which allow less stacking. Compare the convenience of shelves 24 inches from front to back and shelves only 15 inches deep. Would you rather have more shelves narrow and near together or fewer shelves wide and far apart?

6. Make a scale drawing of your own kitchen, using 1 inch to represent 1 foot. Show windows and doors in their correct locations. Plan an arrangement of range, sink, refrigerator, and cabinets which you think would be ideal.

7. What is the height of the working surfaces in your home kitchen? Are they right for the people who use them? Measure the height of the working surfaces in the food laboratory. Are they correct for all the girls in the class?

FUN WITH FOOD AT HOME

1. Report any rearrangements which you have been able to make in your home kitchen that have helped you to speed up your work.

4. Choose equipment for saving time and energy

The right kitchen equipment, both large and small, can greatly speed meal preparation and dishwashing. Every article should be selected for its ability to perform a job efficiently and quickly and for the ease with which it can be kept clean.

Tools can speed the job. A very small and simple tool can save much time for the homemaker-cook. For example, a vegetable parer can do the job more quickly and efficiently than the usual paring knife. As shown in the illustration on page 447, the girl uses one for peeling potatoes. Notice also that she drops the peelings on a piece of paper toweling which can be gathered up easily and disposed of in the garbage. A parer is not only quicker to use but more efficient than a paring knife for potatoes, carrots, apples, and similar vegetables and fruits. The peelings are generally thinner than can be secured with a paring knife. When selecting a parer, be sure to test the comfort of the handle as it rests in your hand. Those made with hollow metal handles are not as comfortable to hold as those with round wooden handles.

Other small articles costing a small sum can prove valuable to the cook in saving time and energy. No standard list of such tools can be given because those which are particularly helpful in one kitchen may not be equally so in another. Good questions to ask in the selection of this type of equipment are: Will this tool truly save labor? Is it useful for everyday food preparation or only for fancy foods? Is it easily manipulated?

Utensils should be easy to use. Pots and pans of all kinds should be designed to give the most possible convenience in use.

1. Straight sides are most economical of space when two or more pans are placed upon the top of the range at the same time. Bulging or slanted sides may crowd the pans away from the burners. The kettle pictured on page 433 is a good example of straight-sided utensils.

2. Handles should be shaped so that they are easy to grasp. Two side handles on a kettle are much better than the pail handles used on some large utensils. The pail handle does not give one firm control of the kettle when lifting it from the range, and painful accidents may happen if the kettle tips while containing hot liquid.

3. Covers should fit tightly and not slip off easily.

4. Pans and covers should be designed so as to make their washing and cleaning easy. Spouts and handles should be attached without

uneven edges or rivets, which make cleaning difficult. Covers should not have deep creases around the edges that will collect grease and dirt.

5. Saucepans or skillets made for pouring should be double-lipped so that liquid can be poured from either side as suits the worker. Lipped pans should have specially shaped covers made to fit over the lips.

Pressure saucepans are time-savers. The pressure pans for small-quantity cooking are the greatest timesavers which have been put on the market in recent years. It is an adaptation of the large pressure cooker long used for canning.

There are several kinds of pressure pans on the market, made by different manufacturers, with varying controls and devices for sealing the cover into place. Whatever type of pan is used, care should be taken to follow the manufacturer's directions for use.

The pressure pan greatly reduces the amount of time required for cooking meat, vegetables, and dried foods. The busy homemaker who has a pressure pan can start her meal much later than if the same foods are prepared in the usual utensil. These small pressure cookers are much more speedy than the large, old-fashioned canning cookers because of their smaller size and the quick and easy way of sealing the lid. In addition to saving time, the pressure pan also saves fuel because the cooking time is much shorter. The homemaker also saves energy because she need not remain in the kitchen for so long a period.

In some electric ranges, a pressure cooker is built into a well as shown in the picture on page 11. The kettle which fits into the well can be used either for pressure-cooking or fitted with an ordinary cover for braising and simmering. Because the well is insulated against the escape of heat, a very small amount of heat is required for cooking in it. The picture on page 95 shows baked beans being removed from a deep well cooker.



Good Housekeeping Institute

A vegetable parer is a convenient piece of small equipment.



American Mutual Liability Insurance Company

Keep your electrical cords and appliances in good condition. Never delay repairs. Avoid fire hazards and danger of shocks.

Laborsaving equipment for the kitchen. Manufacturers of electrical equipment have produced many laborsaving devices for the kitchen. These range from simple toasters to dishwashing machines and garbage-disposal units. Practically all modern kitchens have one or more pieces of electrical equipment, and generally the homemaker plans to add more pieces as her budget permits.

The selection of such equipment should be considered in terms of usefulness in a particular kitchen. An automatic electric toaster, which pops the toast up away from the heat when it is done, saves watching the toast in the oven and prevents burning it. However, the automatic toaster is expensive, and if toast is seldom served, the convenience gained would hardly justify the expenditure. Electric roasters, mixers, and coffeemakers are all excellent laborsaving devices, but if one cannot afford all of them, choose the piece which will save the most time and energy.

The second point in the selection of laborsaving equipment is evaluation of the ease with which it can be used. If it involves considerable

inconvenience in getting the piece out and putting it away again, no time or energy may be saved. For example, suppose you wish to squeeze two glasses of orange juice. Since your electric mixer has an attachment for doing this job, you bring the mixer from its storage shelf to the table and attach the squeezer. After the juice is squeezed, you take off the parts which must be washed, return the mixer to its shelf, and later wash, dry, and store the attachments. This involves several operations for securing only two glasses of juice. Probably, it could have been obtained more quickly and with less motion by using a hand squeezer. On the other hand, if you wish to squeeze a large quantity of juice, the electric device will prove helpful. Many people use an electric mixer for all such jobs as mashing the potatoes and scrambling eggs. Others prefer to do these jobs by hand. The advantage of the electric mixer for certain types of jobs is a matter of personal opinion.

A third point to consider in the purchase of this type of equipment is whether you have a good place to keep it. A mixer should stand on the counter where it will be used for making cakes, whipping cream, or for other purposes. An electric roaster should stand in the place where it will be used, as these pieces are very heavy and are not easily lifted about. With lighter pieces of equipment, such as toasters and waffle irons, this point is not so important. However, it is always quicker and easier to keep them near the point of use. See the illustration on page 441. Note the electric roaster which stands on the counter in the kitchen illustrated on page 450.

An electric dishwasher is a special piece of equipment that a great many people would like to have, but it should be remembered that an automatic dishwasher does not do the whole job with the flick of the switch. It must have help from the human dishwasher! Dishes must be carried to the kitchen, scraped, rinsed, and stacked in the machine before the washing begins. Afterward, they must be carried to the storage cupboard. If there are a great many dishes, an automatic dishwasher is worth while in saving time and effort.

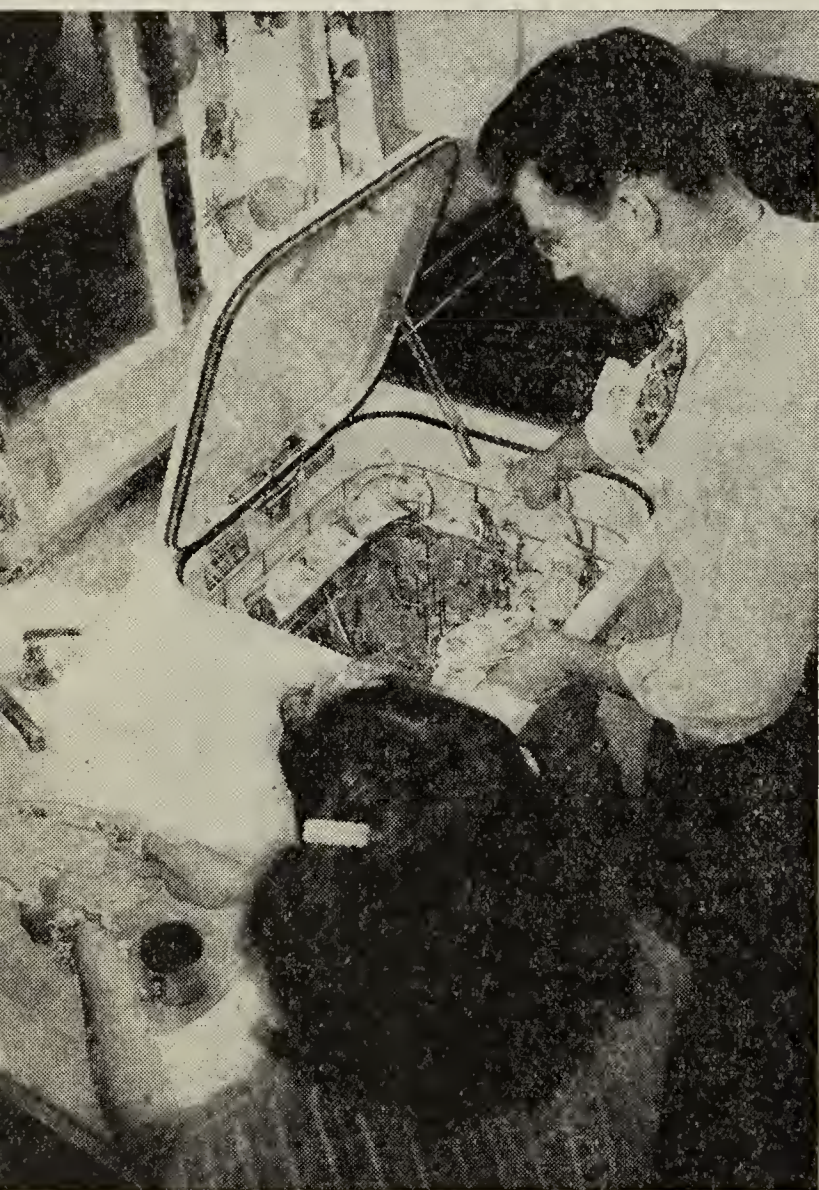
Consider the convenience features in large pieces of equipment. Refrigerators, ranges, washers, and cabinets should always be evaluated for their convenience features as well as for durability, service, and other points. Here are some points to look for in their selection.

1. Are the cabinet drawers and doors subdivided into convenient compartments (as discussed on pages 439 to 443)?

2. Should the refrigerator have a left-handed or right-handed door to suit your kitchen?



Langley High School, Pittsburgh Public Schools



Langley High School, Pittsburgh Public Schools

Top: Conveniently located cabinets for supplies speed up the food preparation process.

Left: An electric dishwasher and disposal is a great timesaver in the modern kitchen.



Langley High School, Pittsburgh Public Schools

This washer handles the complete washing process automatically. Soiled table linens and other articles are placed in the machine; soap, and water softener, if necessary, are added and the dial is set. The rest is done by the machine, including the rinsing and drying for hanging on the line. To the right is an automatic electric dryer, which will leave the articles completely dry or damp enough to iron as desired.

3. Is the storage compartment in the refrigerator the right size to suit your needs?

4. If the refrigerator or range stands on legs, is there enough space for easy cleaning?

5. Does the refrigerator ice tray have a mechanical release?

6. Does the range have a heat control on the oven?

7. Is there a pilot light for the burners?

8. Are there sharp corners, edges, or seams which make cleaning difficult?

9. Are the oven racks well anchored to prevent tipping and made from flat strips to prevent tipping of dishes?

10. Are the burners nonclogging and easily taken apart for washing?

11. Is the over-all size of the range, refrigerator, or cabinet right for your kitchen?

12. Are light fixtures arranged so that adequate lighting is provided for each working surface?

CLASS PROJECT: CAKE MIXED WITH THE ELECTRIC MIXER, USING THE "NEW METHOD."

This is a demonstration lesson.

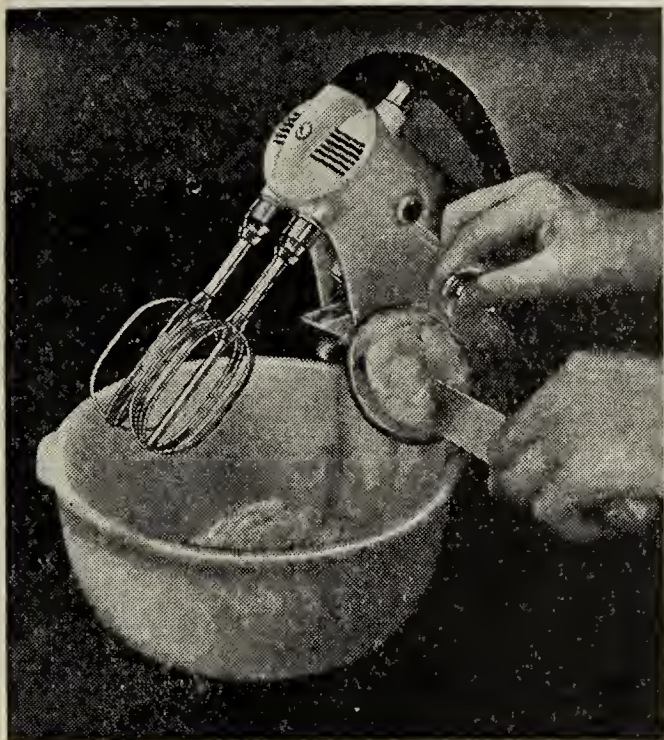
1. One group should be selected to assist the teacher in this demonstration.
 2. Study the recipes on page 237 and in recipe books supplied by manufacturers.
 3. Compare the different methods of combining ingredients and decide which one will be used for your demonstration lesson. Discuss also the possibilities for using the electric mixer when you are making a cake in the usual way.
 4. Each member of the class should sample the cake. Then hold a discussion for the evaluation of the cake according to the standards given on page 234.
-

CLASS ACTIVITIES

1. What laborsaving device do you think would be most helpful in your home kitchen? Why?
 2. Watch a demonstration of using several pieces of electrical equipment for the kitchen.
 3. Visit a ten-cent store and report on the small articles of kitchen equipment which are designed for speeding up food preparation.
 4. Collect pictures of good utensils, and arrange a bulletin board exhibit with labels pointing out laborsaving features.
 5. Arrange a display of kitchen gadgets. Each member of the class should bring one or more gadgets and discuss their special values.
 6. Arrange a visit to a utility company for a demonstration of large kitchen equipment.
 7. Plan your ideal dream kitchen. Your plan should include floor plan, doors, windows, and large equipment.
 8. The pictures and lists on pages 454 and 455 give the recommended equipment to be stored in the unit kitchen of a school foods laboratory. This recommended list of equipment was formulated by 98 home economics teachers in all parts of the country, who cooperated by checking equipment required in the preparation of 487 meals.¹
- You will find it interesting to check the equipment stored in your own unit kitchen with this standard list. The young homemaker who is setting up housekeeping will find it helpful to check her purchases against this list.

¹ Blazier, Florence E., and Coleman, Commercy W. "What Teachers Store in the Unit Kitchen," *Forecast for Home Economists*, October, 1946. Pp. 22-25.

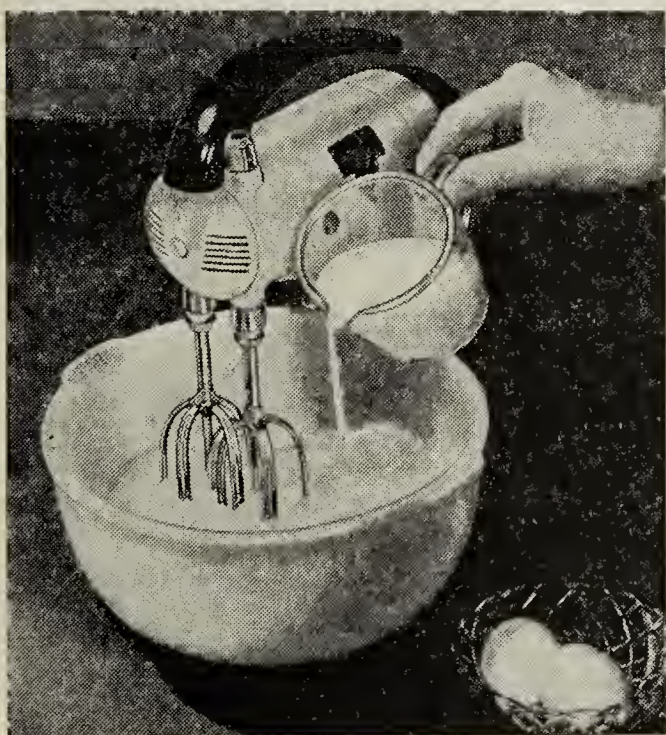
MAKING A CAKE WITH THE ELECTRIC MIXER



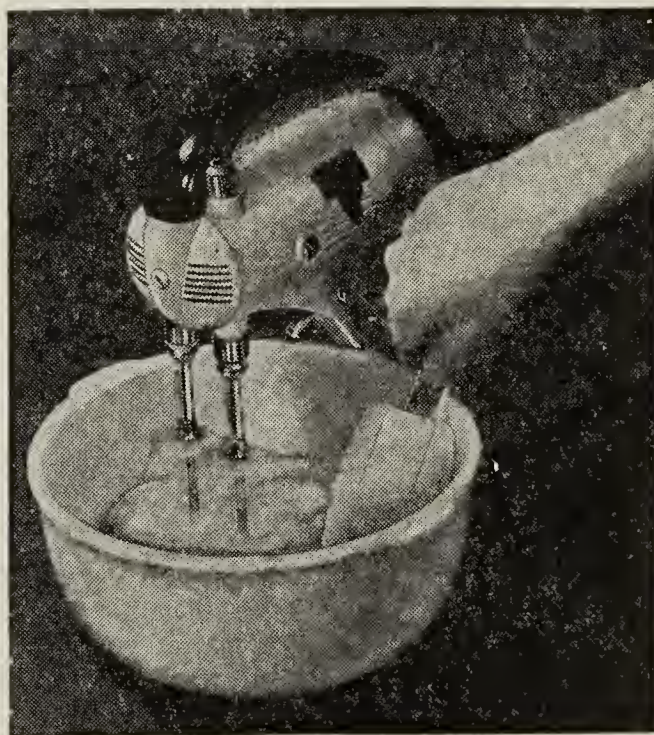
1. Measure the shortening into the mixer bowl. Be sure it is at room temperature, soft and plastic, so it will blend quickly and easily to make smooth batter.



2. Let a few whirls of the beater spread out the soft shortening in the bowl. Now, sift in all the dry ingredients at once. For a cake made by this method, it is not necessary to sift the dry ingredients three times.

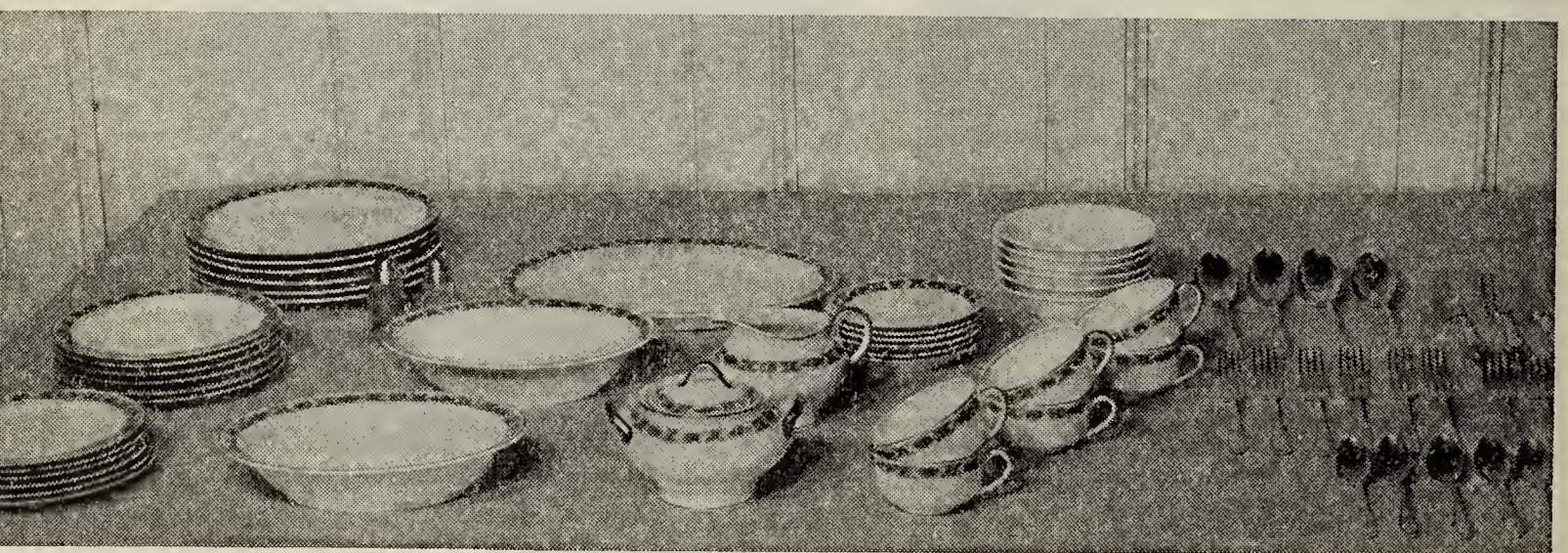
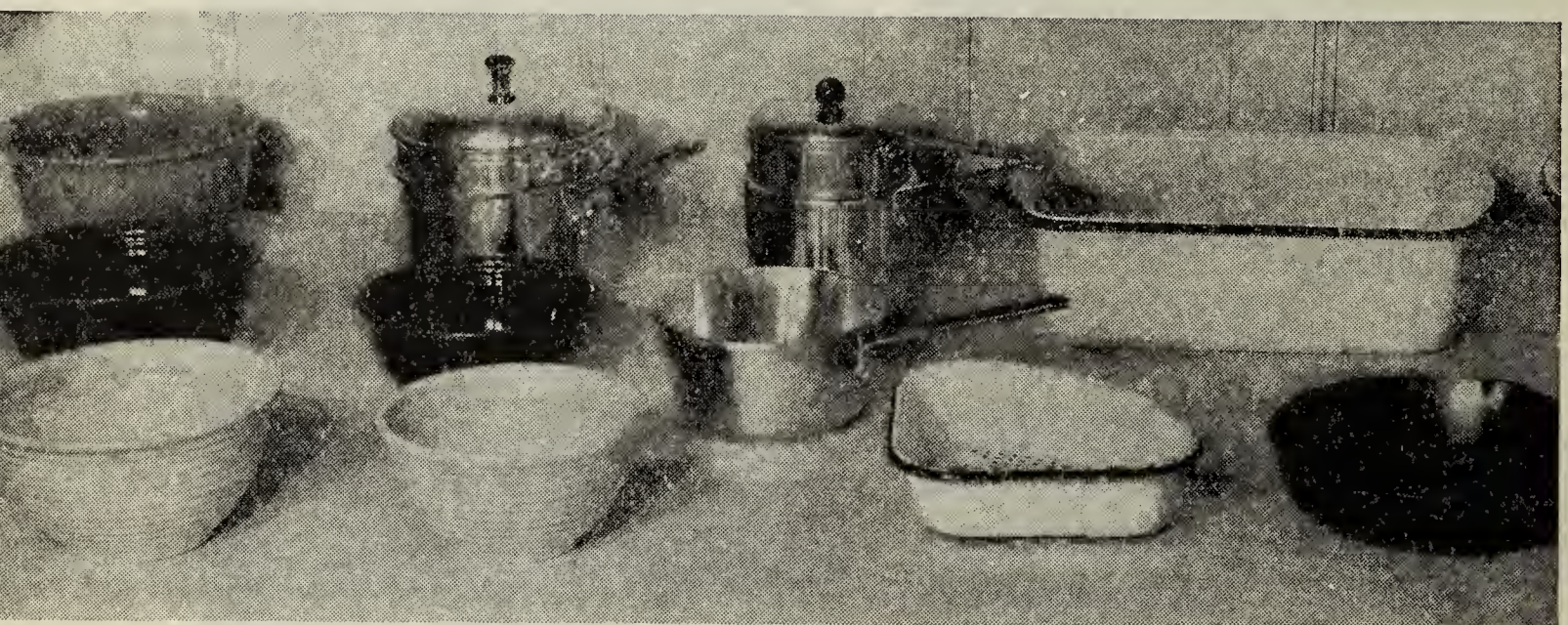
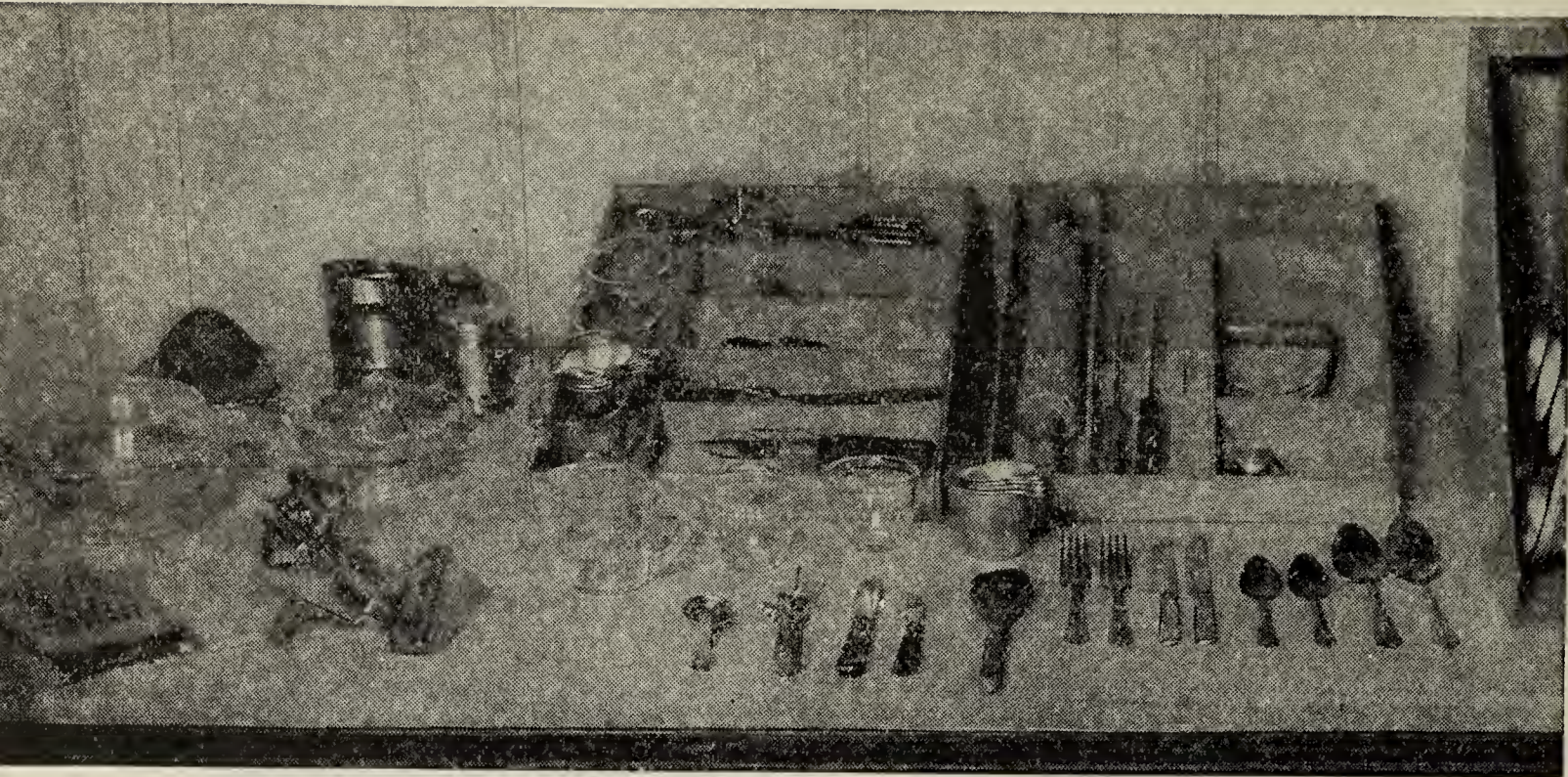


3. Add part of the liquid, as directed by the recipe, and beat 2 minutes. Then add the rest of the liquid and the eggs and beat 1 minute more.



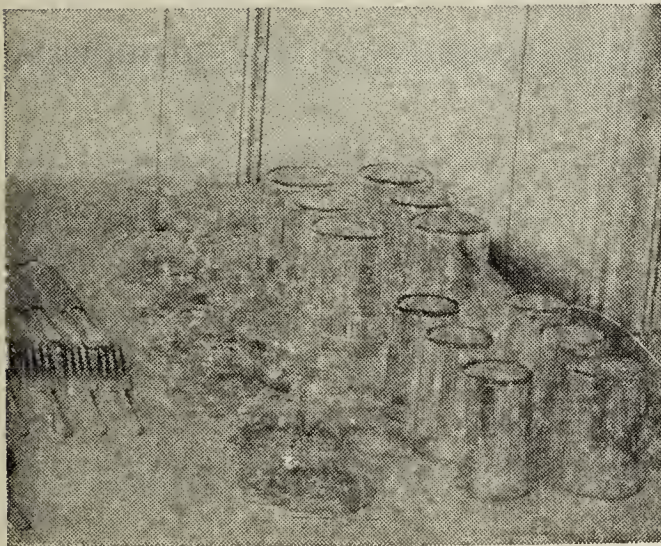
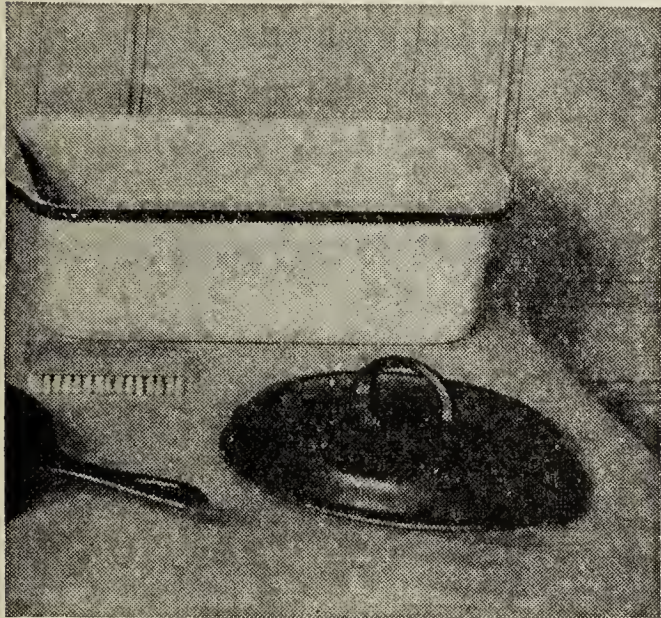
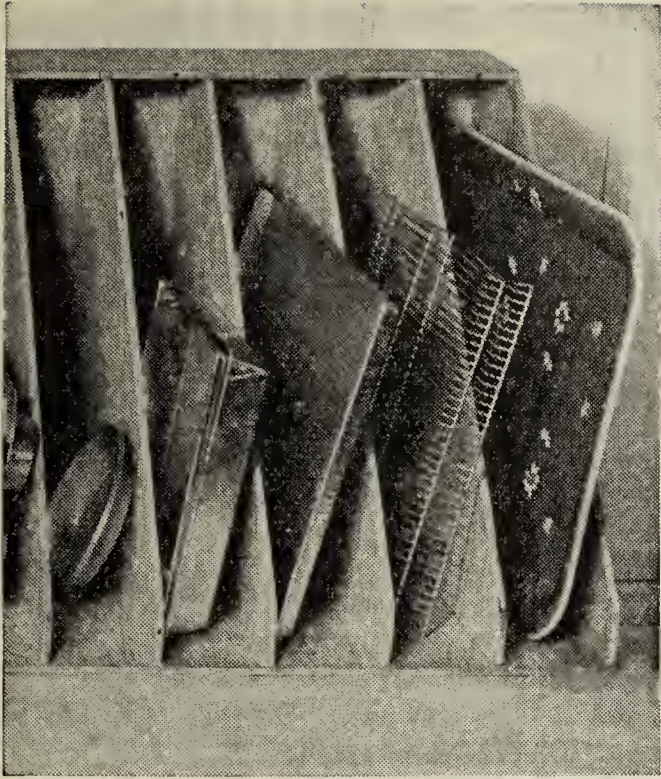
General Foods Corporation

4. Scrape the sides of the bowl often during the mixing so that all the batter is reached. And scrape the beater, too, between the beating periods. A rubber scraper is handy.



Dr. Florence E. Blazier and Forecast

RECOMMENDED EQUIPMENT TO BE STORED IN A



SCHOOL UNIT KITCHEN

Utensils and Tools

- 1 double boiler (upper 1½ quart and lower 2 quart)
- 1 double boiler (upper 2 quart and lower 3 quart) or
- 1 double boiler (upper ½-1¼ quart and lower 1-2 quart)
- 1 saucepan (1 pint) or 1 saucepan (1-1½ quart)
- 1 skillet, 10"
- 1 casserole, 1¼ quart
- 1 or 2 muffin pans, 6 cups
- 2 layer cake pans, 9" x 9" x 1½"
- 1 utility tray, 13" x 16" x 1"
- 2 pie pans, 5" or 2 pie pans, 6-8"
- 1 or 2 cooling racks, 11" x 11"
- 4 custard cups, ¾ cups
- 1 bowl, 3 quart
- 2 bowls, 2 quart
- 2 bowls, 1 quart
- 1 sifter, 2½ cup
- 1 sieve, 5"
- 1 pastry blender
- 1 or 2 rotary egg beaters
- 1 rolling pin, 10"
- 1 cookie cutter, 1½"
- 2 paring knives, 2½"
- 2 paring knives, 4"
- 1 butcher knife, 8"
- 2 or 4 case knives
- 4 case forks
- 4 teaspoons
- 4 tablespoons
- 2 measuring spoon sets
- 2 measuring cups, glass
- 2 sets Mary Ann cups
- 1 spatula, 7"
- 1 or 2 wooden spoons, 13"
- 1 or 2 rubber scrapers
- 1 salt shaker
- 1 tray, 12" x 15" x ½"
- 1 vegetable brush
- 1 sink strainer
- 2 dish pans
- 1 grater
- 1 cookie sheet
- 1 lemon squeezer
- 1 can opener

China

- 6 dinner or luncheon plates
- 6 salad plates
- 6 bread-and-butter plates
- 6 cereal bowls
- 6 cups and saucers
- 1 platter
- 1 or 2 vegetable dishes
- 1 cream and sugar
- 1 salt and pepper

Glass

- 6 water glasses
- 6 juice glasses
- 6 sherbets

Silver

- 6 knives
- 6 forks
- 6 teaspoons
- 6 salad forks
- 2 to 4 tablespoons

A SUMMARY OF YOUR STUDY OF THE MEAL THAT GETS ITSELF

Study of this unit should help you to understand the principles of management involved in kitchen activities and to apply these principles in improving your own work. Can you give an example to illustrate each of the following points?

Selection for convenience

Small kitchen equipment
Utensils
Electrical equipment
Ranges
Refrigerators
Cabinets

Skills

Meal preparations according to time
schedules
Use of the electric mixer

Food management problems

Motion study in meal preparation
Motion study in dishwashing
Simplified routines
Work centers
Schedules for meal preparation
Convenient arrangements of cup-
boards
Kitchen plans
Laborsaving equipment
Planning center

WHAT DO YOU KNOW ABOUT FOOD MANAGEMENT PROBLEMS?

Check your understanding of kitchen management problems by the following tests. Your study of this unit should help you to make a perfect score.

What is wrong?

In each of the following cases, there is something wrong which slows up the work. What is it? On a separate sheet of paper write the number of each problem, and opposite the numbers write the letters (*a*, *b*, etc.) to indicate the correct answers. **Do not write in this book.**

1. When Mary Adams washes the dishes, she follows this procedure: (a) carries the dishes from the dining room to the kitchen on a tray; (b) takes them directly to the right-hand drainboard of the sink; (c) scrapes and rinses in one operation by holding each dish under the faucet, thus permitting the refuse to slide into a colander; (d) washes each article in hot, soapy water and sets it in a rack placed on the left-hand drainboard; (e) rinses the dishes with scalding water and leaves the china to air-dry; (f) wipes the glasses and silver by hand; (g) sets the glasses on a tray as she dries them to carry to the cupboard; (h) puts the knives, spoons, forks, and other small tools in a pile on the counter, leaving them to be sorted and put away after the sink is cleaned up.

2. When Ann Everett prepares dinner, she follows this routine: (a) sets

the table; (b) puts the potatoes in to bake; (c) puts the carrots over the burner to boil; (d) prepares the cole slaw; (e) broils the hamburger patties; (f) puts food on the table.

3. When Patty Brown bakes cookies, she follows this procedure: (a) lays recipe on counter at mixing center where she can see it easily; (b) lights the oven; (c) takes each ingredient and each utensil from nearby storage places as she needs them; (d) hurriedly uses each one as she mixes the batter and pushes it aside; (e) drops batter on cooky tins and bakes the cookies; (f) when cookies are finished, she returns all ingredients to their places and washes the dirty dishes.

To test your understanding of good kitchen arrangement

This is a matching test in which the articles listed in the second column are related to the places named in the first column. Can you match each article with the right place in the kitchen? On a separate sheet of paper write the pairs of terms which belong together. **Do not write in this book.**

Shallow drawers	Knives, forks, and spoons
Sink center	Frying pan
Divided drawer	Dishpan
U-plan kitchen	No through traffic
Range center	Packaged and bottled foods
Mixing center	Towels
Stepped shelves	Cakes and pie tins
Vertical partitions	Sugar

To test your general understanding of kitchen management

This is a true and false test in which you will decide which statements are correct and which are incorrect. Use common sense as well as facts you have learned in making your answers. On a separate sheet of paper write the number of each statement and the word “true” or “false” after it. **Do not write in this book.**

1. Fast movement of the hands and feet is more important in kitchen activities than the elimination of unnecessary motions.
2. Small articles, such as measuring spoons and measuring cup, should be duplicated at the sink and mixing centers.
3. An electric mixer can save time and energy in mixing cake batters.
4. Disorderly habits in meal preparation make the cleaning-up job longer.
5. Menus should be planned for the amount of time required for preparation as well as for food values.
6. Dishes are cleaner when dried by hand with linen towels.
7. A cleaning schedule in the kitchen saves time.
8. Simple remodeling inside old cupboards and drawers can help to save time.

9. Swinging doors are always advantageous in the kitchen.
10. A pail handle is not so desirable as two rigid side handles on a large kettle.

REFERENCES FOR FURTHER READING

- Gorrell, F. L., McKay, H., and Zuill, F., *Food and Family Living, Revised*. J. B. Lippincott Company, 1947. Pp. 326-346.
- Harris, F. L., and Henderson, R. A., *Foods*. D. C. Heath and Company, 1938. Pp. 391-424.
- Harris, J. W., and Speer, E. L., *Everyday Foods*. Houghton Mifflin Company, 1946 and 1941. Pp. 139-158.
- Schloss, Hannah W., *Short-Cuts and Leftovers*. M. Barrows and Company, 1938.
- Time Management for Homemakers*. Household Finance Corporation, 1948.
- Trilling, M. B., and Nicholas, F. W., *The Girl and Her Home*. Houghton Mifflin Company, 1945. Pp. 66-123.
- Trilling, M. B., and Nicholas, F. W., *You and Your Money*. J. B. Lippincott Company, 1944. Pp. 241-262.

10

More Food for Less Money

One of the homemaker's major problems is how to get the best possible food values for the least money. As a junior homemaker you have a share in dealing with this problem. *Every trip to the store* means that you are responsible for getting good value for the family food money.

Many foods can be judged by general appearance, color, texture, size, and weight. To become expert in selecting such foods as fresh produce and meats which can be judged by inspection, one must learn to recognize good qualities. In the previous units of study, we have become acquainted with many standards which are helpful in judging foods by their appearance. However, it takes considerable experience in looking at foods and comparing their qualities before you become an intelligent buyer. Every trip to the store should add to your experience and help you to become a good buyer.

In some foods the values are entirely hidden, being enclosed in a package, tin can, or bottle. In the selection of these commodities one must rely on other aids than inspection. The best procedure is always to *read the label* and to *read it intelligently*.

The most food for the least money is not entirely a matter of selection in the store. Using every bit of food to the best possible advantage is one way of stretching the food dollar. Leftover pot roast used in croquettes for a main dish may mean a dollar saved for lamb chops. Preservation of food by canning or freezing is another way of making the food dollar reach farther.

Another way of expanding the food budget is through the choice of the cheaper foods which will provide a balanced diet. Nutritive values are not confined to the higher-priced brackets.

1. First aid for buyers!

Buying food for the family is a highly complicated business. The best of plans may go astray on a trip to the grocery store, often with disastrous results. Shortages, high prices, and the multiplicity of foods may easily cause the shopper to become bewildered and make mistakes. First aid to the homemaker-buyer is her own understanding of the buying problem and her own buying habits.

Look at and compare qualities. The buyer must learn to know good qualities in fruits, vegetables, meats, and other unpackaged goods when she sees them. Constant comparison of one head of lettuce with another will result in a mental picture of the way a good head of lettuce should appear. Then as you buy lettuce from time to time, you can judge its quality with a fair degree of accuracy.

With repeated experiences in buying, you can build up a list of standards to cover a wide number of products. Every time you shop is an opportunity for you to look at and compare qualities. Your previous study has already given you some experience in recognizing good qualities. To refresh your memory, review the discussions of the characteristics of high-quality tomatoes and salad greens, citrus fruits, potatoes, beef, veal, pork, lamb, fish, and poultry. Space in this book does not permit a complete discussion of all the food products which can be judged by appearance.

Here are some general suggestions for judging quality in fresh fruits and vegetables.

1. Look for indications of ripeness when buying fruits. With the exception of bananas and pears, which ripen after picking, fruits should be ripe when purchased. Color can be used for one guide in detecting ripeness but not as the only guide. The firmness of the fruit is another guide. It should be neither hard nor soft. However, you should be careful in examining fruits that you do not bruise them. Dealers naturally object when customers damage their fruits by handling. If the dealer does not allow the fruit to be touched, ask him to guarantee the ripeness.

2. Green vegetables should be fresh, succulent, and crisp. Avoid wilted, bruised, and yellowed greens. Green beans should snap easily when bent double. Strong green color is an indication of good quality.

3. Root vegetables should be clean, smooth, and firm. Avoid vegetables with deformities, flabbiness, and decay spots. Carrots and beets should be sold with at least two inches of tops attached.

4. Learn the varieties of common fruits which are suitable for various purposes. For example, Ben Davis and Rome Beauty are good cooking apples, and Stayman, Winesap, and McIntosh are excellent apples for eating.

5. Buy by the pound rather than the piece or dozen when possible. In this way you are better able to judge the quantity that you get for your money.

6. Always consider quality in deciding whether you are getting a bargain. Marked-down vegetables which are withered and bruised may be very expensive because only a small portion of them is edible.

7. Remember your basic food groups. If one green or yellow vegetable is expensive, try to find another which is cheaper.

8. Buy in season when prices are low. Listen to market reports on the radio and look for them in the newspapers.

Read the labels. On your next trip to the grocery store, look about for labels. You will see hundreds of them on boxes, bottles, cartons, cans, glass jars, and meat cuts; all of them are meant to be read. Of course, you cannot read every label in the store, but certainly you can read those on the goods which you buy. Some of the information is printed because the manufacturer wanted you to know about his product, and some of it is there because it is required by a federal law. Many food processors wish to tell buyers all the facts about the product inside the can or box, and they must give truthful information on certain points.

The Federal Food, Drug, and Cosmetic Act requires the label on all packaged or canned foods to state the name of the manufacturer, the name of the product, the amount of the contents in pounds or ounces, and a list of the ingredients used. In addition to these facts, the manufacturer may add other information, such as a brand name, descriptive material, grade or quality, and suggestions for using the product. All information given must be truthful and not misleading.

Labels can help you get your money's worth. The habit of reading labels is excellent first-aid procedure in getting the most food for the least money. Do you know *how much* food you are getting when you buy a candy bar or a package of breakfast food or a can of beans? If you read the labels, you do. And if you read the labels on other candy bars, breakfast foods, and beans, you know whether you are getting the most food for the least money. Suppose that you are shopping for the family food and the list given to you by your mother includes a box of crackers. Her instructions to you are to buy the cheapest box of

crackers, meaning the best value for the money, not the smallest box. You find two boxes of crackers, one priced at 20 cents and the other at 21 cents. The boxes appear to be about the same size, but, since they are different shapes, you cannot tell which one contains more crackers. When you *read the label* you find that the box costing 20 cents contains 16 ounces and the box costing 21 cents 14 ounces. This means that the crackers cost $1\frac{1}{2}$ cents per ounce in the 21-cent box and only $1\frac{1}{4}$ cents per ounce in the 20-cent box. This means that the 20-cent box not only costs one cent less but at the same time contains more crackers.

This type of simple arithmetic can often aid the buyer in determining which box of crackers, breakfast food, or soap to buy and which can of beans, peas, or other commodity to buy. It is not necessary to do mental calculations every time you buy the same products because you will be able to remember which brand is more economical.

The few cents saved on boxes of crackers may not be important, but when you apply this same analysis of costs to several different foods which are bought frequently, the savings can add up to several dollars. For example, your family may use one or two loaves of bread every day. If one loaf weighing one pound sells at 16 cents and another weighing 18 ounces also sells at 16 cents, it is obviously more economical to buy the second loaf, providing the quality is the same. Usually a slice of bread weighs about an ounce, so you would get two more slices with every loaf of bread.

When next you buy a loaf of bread, look for a statement of its weight on the wrapper. It may be that you will not find it because the federal law does not affect foods made and sold within the same state. Therefore, if the bread was baked by a local company and there is no *state law* requiring labeling for weight, a statement of weight may not be given. The requirements of the Federal Food, Drug, and Cosmetic Act apply only to goods which are sold across a state line.

The same method of computing costs of food by the ounce can be used profitably for selecting the best buys in canned goods. Cans come in many sizes and are sometimes referred to as No. 1, No. 2, No. $2\frac{1}{2}$, and so on. It is difficult to judge the amounts contained in these cans with varying heights and widths, and it is also difficult to remember the number of ounces contained in each type. The best procedure is to note the number of ounces contained in the can as stated on the label and to figure the cost per ounce. In this way it is easy to compute the comparative costs of No. 2, No. $2\frac{1}{2}$, and No. 3 cans. The table on the opposite page gives useful information about can sizes.

COMMON CAN SIZES

CAN	DIAM-ETER	HEIGHT	NET WEIGHT *		CONTENT	CHIEF USES
	<i>inches</i>	<i>inches</i>	<i>pounds</i>	<i>ounces</i>	<i>cups</i>	
202 B F	$2\frac{1}{8}$	$2\frac{7}{8}$	0	$4\frac{1}{2}$ – $5\frac{1}{4}$	$\frac{1}{2}$	Baby foods
8 Z, tall	$2\frac{11}{16}$	$3\frac{1}{4}$	0	$8\frac{1}{2}$	1	Meat and fish products, specialties
Picnic (No. 1 Eastern)	$2\frac{11}{16}$	4	0	$10\frac{1}{2}$	$1\frac{1}{4}$	Some fruits, juices, soups, vegetables, meat and fish products, specialties
No. 2 Vacuum	$3\frac{7}{16}$	$3\frac{6}{16}$		12	$1\frac{1}{2}$ – $1\frac{3}{4}$	Whole-grain corn
No. 300	3	$4\frac{7}{16}$	0	$14\frac{1}{2}$	$1\frac{3}{4}$	Same as Picnic
No. 1, tall	$3\frac{1}{16}$	$4\frac{11}{16}$	0	16	2	Fruits, juices, fish products, some vegetables
No. 2	$3\frac{7}{16}$	$4\frac{9}{16}$	1	2	$2\frac{1}{4}$ – $2\frac{1}{2}$	Fruits, juices, vegetables
				to		
			1	4		
No. $2\frac{1}{2}$	$4\frac{1}{16}$	$4\frac{11}{16}$	1	12	$3\frac{1}{4}$ – $3\frac{1}{2}$	Fruits, tomatoes, beets, spinach, pumpkin
				to		
			1	14		
No. 3 cylinder	$4\frac{4}{16}$	7	2	14	$5\frac{3}{4}$	Juices
No. 10	$6\frac{3}{16}$	7	6	0	12	Fruits, vegetables
				to		
			7	0		

* To determine approximate liquid measure, use one pound as one pint.

Glass jars are now used to some extent to replace tin cans. Two sizes in common use are:

JAR	NET WEIGHT		CONTENT	CHIEF USES
	<i>pounds</i>	<i>ounces</i>	<i>cups</i>	
No. 303	1	0	$1\frac{3}{4}$ to 2	Vegetables
		to		
	1	1		
No. $2\frac{1}{2}$	1	12	$3\frac{1}{2}$	Fruits, pumpkin, sauerkraut
		to		
	1	14		

Milk is packed in special cans which differ in proportions from those used for other foods. These sizes are:

CAN	DIAMETER	HEIGHT	NET WEIGHT	APPROX. CONTENT
	<i>inches</i>	<i>inches</i>	<i>ounces</i>	<i>cups</i>
Milk				
Evaporated				
Tall can	$2\frac{14}{16}$ – $2\frac{15}{16}$	$3\frac{14}{16}$ – $3\frac{15}{16}$	$14\frac{1}{2}$	$1\frac{2}{3}$
Small can	$2\frac{8}{16}$	$2\frac{6}{16}$	6	$\frac{2}{3}$
Large can	$5\frac{14}{16}$ – $5\frac{15}{16}$	$8\frac{5}{16}$	128	15
Condensed	$2\frac{15}{16}$	$3\frac{7}{16}$	15	$1\frac{1}{3}$

From *Handbook of Food Preparation* by the American Home Economics Association.

THE
MEAT
CONTAINED
HEREIN
HAS BEEN
INSPECTED
AND
PASSED
AT AN
ESTABLISHMENT
WHERE
FEDERAL
INSPECTION
IS
MAINTAINED.

INGREDIENTS

BEANS
PORK
SUGAR
MOLASSES
SALT
BAKING SODA
SPICES
SUFFICIENT
WATER TO
PREPARE
PROPERLY

BB-58



ONE LB. NET WT.

ONE LB. **HEINZ** NET WT.
OVEN BAKED BEANS
WITH MOLASSES SAUCE AND PORK - BOSTON STYLE

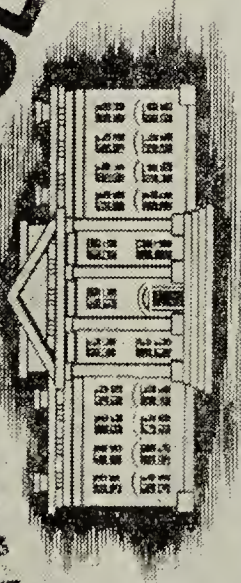


READY TO SERVE

EMPTY CONTENTS INTO A SAUCEPAN AND TO AVOID SCORCHING, STIR WHILE HEATING. MAY ALSO BE EMPTIED INTO A CASSEROLE AND HEATED THOROUGHLY IN THE OVEN. DO NOT IMPAIR FLAVOR BY ADDING WATER OR OVER-HEATING.

MANUFACTURED BY **H.J. HEINZ CO.** PITTSBURGH, PA.
IN U.S.A. BY **H.J. HEINZ CO.** LONDON-TORONTO

WHITE HOUSE*



HOMOGENIZED • VITAMIN D CONTENT INCREASED

EVAPORATED MILK

PROVIDES
400 U.S.P. UNITS OF
PURE VITAMIN D₃
PER PINT OF
EVAPORATED MILK

NET WT. 14½ OZ.
13 FLUID OZ.
THE GREAT
ATLANTIC & PACIFIC
TEA COMPANY
NEW YORK, N. Y.
DISTRIBUTOR

* NOT CONNECTED WITH ANY COMPANY USING A SIMILAR NAME OR BRAND



WHITE HOUSE EVAPORATED MILK
WITH ADDED PURE VITAMIN D₃



FOR INFANT FEEDING: White House Evaporated Milk is ideal for infant formulas because of its liberal vitamin D content, its uniformity, wholesomeness and digestibility; its butterfat and milk solids content, its complete sterilization and its keeping qualities. As with any cow's milk, additional vitamin C and iron should be supplied the infant from other sources. Consult your physician for a formula.

HOMOGENIZED: The natural fat globules of the milk are broken up into tiny particles, thus making White House easily digested.

FOR COFFEE AND CEREALS: Use undiluted or dilute to taste with fresh milk.

FOR COOKING AND BAKING: Use diluted with equal parts of water wherever a recipe calls for milk. Using White House in soups, sauces, creamed meats, fish, poultry, and vegetables, desserts, cakes, biscuits, and beverages is an easy and thrifty way to give your family more vitamin D.

TO WHIP: Make sure Milk is thoroughly chilled—almost freezing—then whip.

VITAMIN D CONTENT

The vitamin D content of White House Evaporated Milk has been increased by the addition of not less than 25 U. S. P. units of pure Vitamin D₃ per fluid ounce. This will provide not less than 400 U. S. P. units per reconstituted quart when equal volumes of White House milk and water are mixed, thus serving as an excellent source of this vitamin for infant, child or adult. White House is made only of milk from cows in tested herds... evaporated to double the richness of whole milk... contains not less than 7.9% butterfat... meets all Government standards. It is processed under modern sanitary conditions and supervised throughout by expert dairymen and graduate chemists. When an equal amount of water is added the resulting product will not be below the legal standard for whole milk.

KEEP IN A COOL DRY PLACE • KEEPS WITHOUT ICE UNTIL OPENED • AFTER OPENING, TREAT SAME AS FRESH MILK

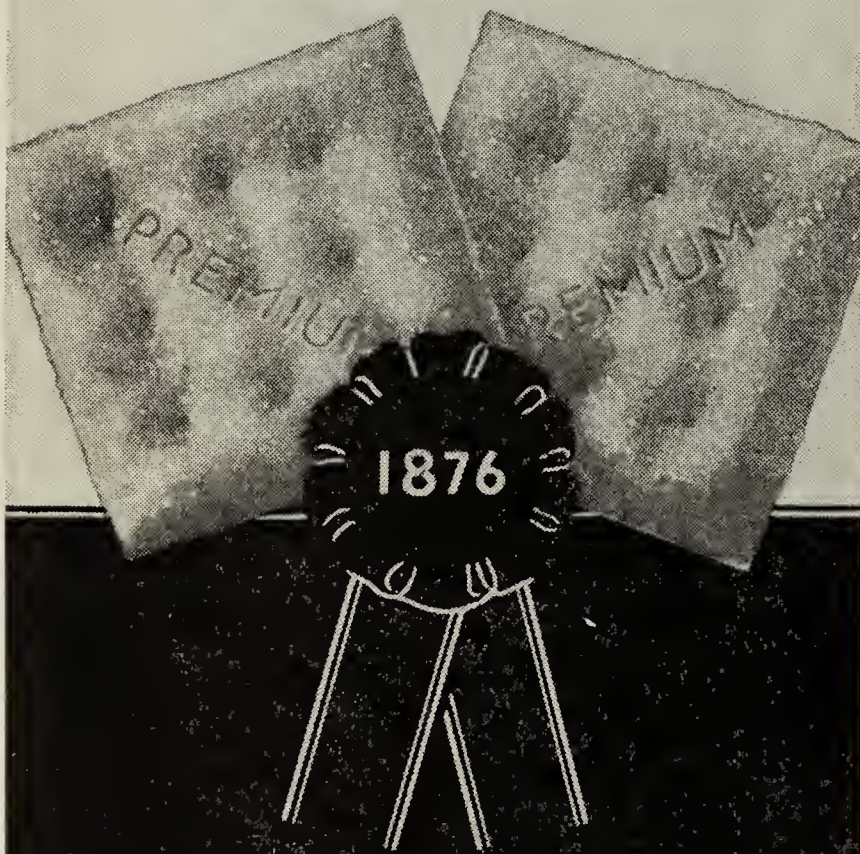
The Great Atlantic and Pacific Tea Company



PREMIUM CRACKERS SALTED

REG. U.S. PAT. OFF.

This popular cracker contains flour, a generous quantity of shortening, salt and leavening.



ONE POUND

NET WEIGHT

A Product of NATIONAL BISCUIT COMPANY
MADE IN U.S.A. ADDRESS: NEW YORK, N.Y.

Kellogg's

RICE KRISPIES

Serve these toasted bubbles of oven-popped rice with milk, for breakfast, lunch or between-meal snacks, adding fruit if desired.

Delicious for the whole family—the tiny members love them. Crisp and so GOOD to eat and easily digested. May be included in wheat allergy diets, too.

Rice Krispies — RESTORED to WHOLE-GRAIN NUTRITIVE VALUE of natural brown rice in thiamine, niacin and iron. Each serving (one cup) supplies important amounts of your daily nutritional requirements. Here's what you get from your "Cereal Bowl"

	Rice Krispies 1 cup (1 ounce)	Rice Krispies with $\frac{1}{2}$ cup milk
Calories	108	186
Protein, grams	1.9	5.9
Fat, grams	0.08	4.58
Carbohydrates, grams	24.9	30.4
Calcium, mg.	7.1	141.1
Phosphorus, mg.	32.3	137.3
Iron, mg.	0.5	0.72
Vitamin A, I. U.		193
Thiamine, mg.	0.11	0.15
Niacin, mg.	2.0	2.12

Fresh or cooked fruits are an appetizing addition to the flavorful goodness of the Rice Krispies cereal bowl. Rice Krispies are excellent to use in cookies, candies and as a meat extender. Try the recipe on this package.

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TRADE MARKS REG. U.S. PAT. OFF.

Left: National Biscuit Company; Right: Kellogg Company, Battle Creek, Michigan

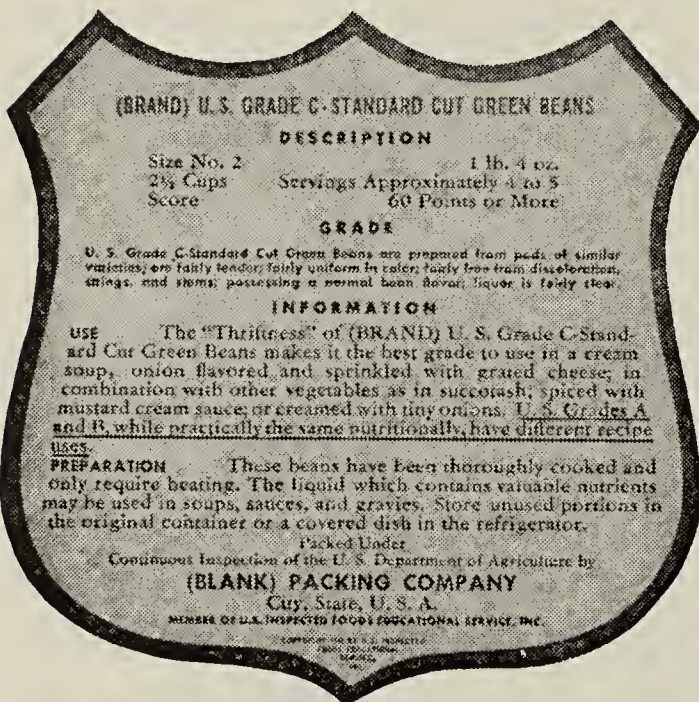
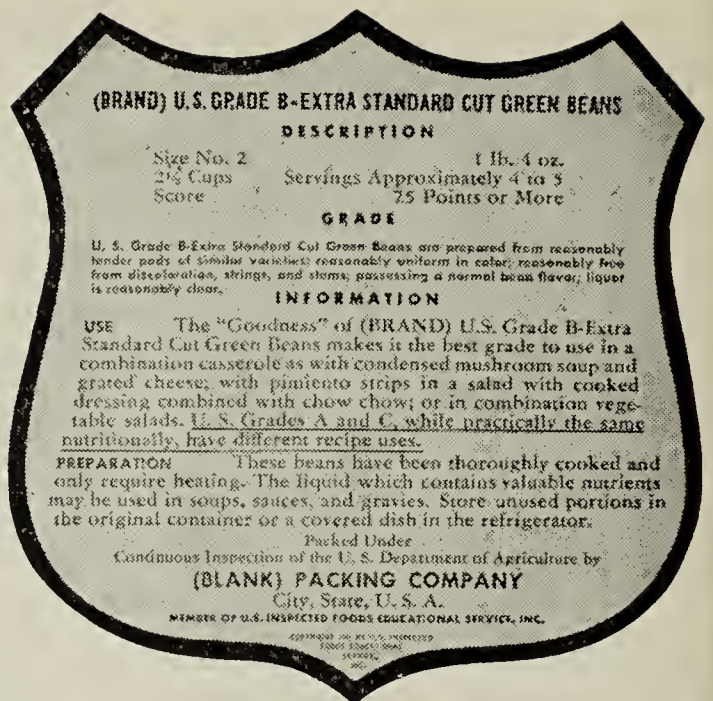
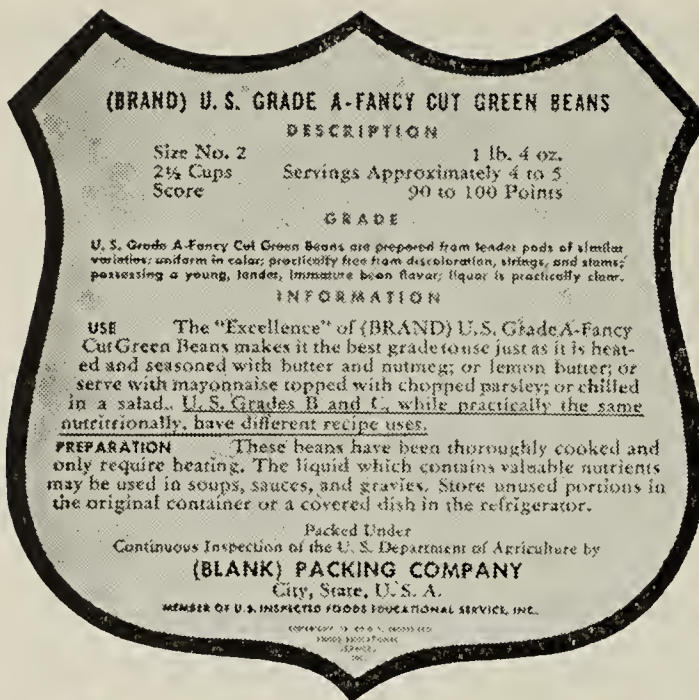
The label tells what's in it. One of the provisions of the Federal Food, Drug, and Cosmetic Act is that the label must state the contents of the can or package in terms of the ingredients used. Read the label from a can of baked beans shown in the illustration on page 464, and you will find the detailed list of ingredients. The label from a can of evaporated milk illustrated on page 465 states that it is made from cow's milk and contains 7.9 butter fat and 25.9 total milk solids. Examination of the label from a cracker box illustrated on page 466 states that the crackers are made from flour, shortening, salt, and leavening.

Another type of information which the manufacturer may give on a label is shown on the portion of a label from a breakfast-food package illustrated on the opposite page. Nutrients are listed, telling what you get in your bowl of cereal. The label for evaporated milk illustrated on page 465 gives the minimum amount of vitamin D which has been added to the product. Such information about hidden values is definitely helpful to the buyer. You will find labels very interesting reading when you are trying to get good value for your money.

Some labels tell about quality. According to a provision of the Federal Food, Drug, and Cosmetic Act, all canned and packaged goods must be safe to eat and be prepared under hygienic conditions. This is a mandatory standard which must be met. The law also states that the product must meet a certain standard, including *identity*, *quality*, and *fill of container*. For example, the standard for canned tomatoes provides that only tomatoes and no substitute may be used. The tomatoes may be whole or in small pieces, have a normal tomato flavor, and be fairly red in color as well as fairly free from defects. The can must be well filled.

If a can of tomatoes or other food does not meet the government standard, it must be plainly labeled to show what is wrong. One of these special labels might state "Below Standard Quality—Good Food—Not High Grade" or "Below Standard Quality—Poor Color" or "Below Standard Quality—Slack Fill." Of course, canned foods which are injurious to health or packed under unsanitary conditions cannot be sold legally.

Besides the standard and substandard qualities, there are two higher qualities. The labels for the better grades may indicate their quality in any way which the canner pleases. He may choose brand names for each quality. For example, he might call the very best quality "Super-super Soup," the second best quality "Super Soup," and the standard quality simply "Soup." Or he may choose to use the terms used by



The shield-shaped labels may be used by food packers who arrange for continuous inspection of their food processing by government inspectors. Look for the small shields on canned goods labels.

many canners, "Fancy" for the very best quality and "Choice" for the next best. Or he may use both his brand name and the trade term, with the result that his best quality tomatoes might bear a label saying "Super-super Fancy Tomatoes."

The government has established quality grades for many canned fruits and vegetables. These grades are indicated as Grade A, Grade B, and Grade C. There is no variation and no guesswork about these standards. They are the same for tomatoes packed in Maryland or in California and the same from year to year. Manufacturers who wish to may use these terms on their labels, providing their products meet the government requirements. Some canners use both their own brand names and the government grades. On some canned goods labels, you will find U. S. Grade A, U. S. Grade B, or U. S. Grade C. The "U. S." in front of the grade means that the product was packed under the

supervision of a government inspector. There is no difference in quality between a U. S. Grade A and a Grade A. The "U. S." indicates that a government expert inspected the food continuously while it was being processed. The U. S. grades are indicated by a shield-shaped design. The labels shown in the illustrations on the opposite page are good examples of this type of labeling.

Government-grade labeling is preferred by many people to brand-labeling because they feel that the standards are more carefully observed. On the other hand, many canners are very particular about keeping their branded products up to standard. Perhaps the best solution to the problem of grade-labeling is to put both the brand name and the government grade on the label.

Read the label for quality-grading. It is definitely advantageous to the consumer to know what quality she is buying. Naturally she does not wish to pay Grade A prices for Grade C beans. Nor does she always want to buy the very best grades. If the beans are to be used in soup or stew, there is no need of paying for more than Grade C. But if the beans are to be served buttered, she may wish to pay the higher price for more perfect beans. Remember that *quality in flavor and appearance has nothing to do with nutritive value*. You can get just as much carotene and other nutrients from a can of Grade C beans as from a can of Grade A beans.

Read the label for special seals and guarantees. Some labels carry the seal of the Council of Foods of the American Medical Association. See the illustration on page 465. This seal means that the product has been accepted by the organization, and the manufacturer is permitted to use the A. M. A. seal on his labels and in advertising. This acceptance does not mean that the council recommends the product but that the product has been examined and found acceptable according to the standards of the association.

Label-readers will find the A. M. A. seal on many foods: breakfast cereals, canned milk, candy bars, margarine, and others. Other seals, such as that granted by the Wisconsin Alumni Research Foundation for vitamin D content, are found on food labels. See the illustration on page 465. The thinking reader will find out about the dependability of these seals, what they mean, and, especially, whether they are issued by reliable organizations.

Display of food should be hygienic. On your trips to the grocery, dairy, and bakery shops, observe the handling of unwrapped foods. Are the candies, salted nuts, cakes, pies, rolls, and cookies left uncov-

ered on the counter? Do people reach across, allowing their coat sleeves to brush over the food? Of course, you do not want your candies or bakery goods to be frosted with dirt and dust. Neither do you want them to be inoculated with disease germs. A customer who sneezes or a salesgirl who coughs upon a trayful of cookies may turn them into dangerous food.

In many states there are laws prohibiting the display of unwrapped foods upon an open counter or rack. Such protective laws are highly desirable; they protect us from the unseen enemies which may cause us to sicken and even die. Are there laws in your state prohibiting the unhygienic display of food stuffs? Are the laws properly enforced?

CLASS ACTIVITIES

1. Study values in candy bars at the present time. Collect wrappers and data on prices. Compare values in flavor, weight, ingredients, and attractiveness. Estimate the number of bites per bar. What is the price per bite? Arrange an exhibition, using wrappers pointing out special values.

2. Study food advertisements for types of information. Collect advertisements which contain the following: fancy descriptive terms, truly informative material, brand names indicating quality, government grades, and special seals or other guarantees.

3. Study labels on bread wrappers. How many give the net weight? The ingredients? How many kinds are enriched? If the weights are not stated on the wrappers, arrange to weigh several different brands. Which one gives the best value for the money? Consider size, ingredients, flavor, and nutritive qualities.

4. Study the comparative costs for some kind of canned food, such as tomatoes, vegetable soup, or peaches. In order to understand qualities better, write to the Food and Drug Administration, Washington, D. C., and ask for a copy of the quality standards for the food which you have chosen. Obtain samples of different brands and judge them according to the quality standards. Which one gives the best value? Remember to figure the cost of the food by the ounce.

2. Conservation and preservation stretch the food dollar

Don't throw good food away! Eat it up; can it; freeze it; dry it. Economists say that a large percentage of edible food is thrown into American garbage cans every day. This is a very unfortunate state of affairs when other countries in our world are suffering from food

shortages and when some of us in this country are forced to live on a limited food budget. The less food we waste, the more there is for other people. The less money we spend for food, the more we have for other uses. This need not mean that we skimp on our diet but that we should be intelligent about using food.

Everyday food conservation. Day-by-day leftovers may not seem important in reducing the monthly food bill, but they can cut it down considerably. It has been said that the best way to use leftovers is not to have any, but there are exceptions to this rule. A cupful of cooked rice left from a chop suey dinner on Monday and a piece of Swiss steak (ground) left from Tuesday night dinner can be combined for stuffing green peppers from the garden. Thus, the main dish costs little, and the food dollar definitely is stretched. Leftover green beans can be combined with some leftover corn for succotash, and the food dollar stretches again. It is not always possible to guess exactly how much food will be eaten, so, in spite of the most careful planning, there are leftovers. In other cases, there are leftovers because the amount of food in a can or jar is too much for one family meal but not enough for two meals. Leftovers properly used are money savers. Sometimes it is advantageous to plan purposely for leftovers. For example, if you are boiling potatoes for dinner and know that you wish to have potato salad for lunch on the following day, it is a good idea to boil them with the dinner potatoes. This saves heat as well as time.

Leftovers in disguise. The homemaker-manager knows that leftover dishes can be as attractive and tasty as any that she can plan. With a little imagination she can find dozens of ways to use leftovers in headliner dishes. A few suggestions for using leftovers are given below. Remember that they should always be stored properly in the refrigerator in tightly covered dishes.

Boiled potatoes may be used for salad, browned potatoes, hash, and creamed potatoes.

Mashed potatoes may be used for soup, potato cakes, and puffs; mixed with meat in croquettes; and used as a topping for meat pie.

Green beans, peas, or carrots may be combined in creamed dishes, combined with hard-cooked eggs in salad, and puréed in soups.

Tomatoes may be used in soups, in stews, in meat loaf, and for juice.

Fruits may be combined in fruit cups, in gelatine salads or desserts, and for toppings on ice cream or on cereals.

Fruit juices and sirups may be used as liquid in gelatine salads and desserts, or added to fruit cups.

CLASS PROJECT: CANNING BY THE PRESSURE-COOKER METHOD OR QUICK FREEZING A NONACID VEGETABLE.

1. This may be a demonstration project only, or it may be a demonstration followed by class work.
 2. Select a vegetable which is available at reasonable prices. Select vegetables of good *quality*.
 3. Study the directions for processing as given in this unit beginning on page 474 to 480.
 4. Watch a demonstration, checking off each step in the directions.
 5. If the class is to can or freeze some vegetables, make a work schedule.
-

Bread: soft bread crumbs (2 or 3 days old) may be used in Brown Betty or as stuffing for poultry or for rolled flank steak, for pork chops, or for shoulder roasts. Dry bread may be ground into crumbs for meat loaf; buttered dry bread crumbs may be used for topping vegetable casseroles.

Biscuits, muffins, and rolls may be split and toasted under broiler heat or spread with butter, sugar, and cinnamon mixture before toasting.

Rice may be combined with ground meat and seasonings for croquettes, meat balls, or stuffing for green peppers. Rice may be added to custard and baked. Raisins may be added also if desired.

Meat may be diced and combined with vegetables for meat pie and other casserole dishes. It may be ground and mixed with salad dressing for sandwich filling. It may be sliced for hot sandwiches with gravy. Ham and veal are good creamed or à la king. Meat may be added to soups.

Chicken and turkey may be served cold and sliced, creamed, à la king, in a casserole with biscuit or pastry topping.

Storage of leftovers. Cooked foods should be stored with just as much care as raw foods. Some people think that leftover meats and vegetables can be safely stored on the pantry shelf, but bacteria can cause spoilage of cooked foods much more rapidly at room temperature than in a refrigerator. Either ice-cooled or mechanical refrigerators can keep your leftovers in good condition for three or four days, and sometimes even longer. Do not expect leftovers to remain good for an indefinite amount of time, because they can spoil even in the refrigerator. Put them into tightly covered dishes and store them carefully. Square-shaped dishes are economical of space on the refrigerator



National Pressure Cooker Company

Fruit cellar shelves filled with her canning efforts are the pride of the homemaker.

shelves. Dishes can be tightly covered with the plastic caps made with elastic edges.

Food preservation stretches the food dollar. Fresh fruits and vegetables, served straight from garden and orchard, are tops in nutritive value, flavor, and eye-appeal, but they cannot be grown in winter climates. Consequently, we must depend upon some form of food preservation for these products during the winter months. Canning, drying, dehydrating, and freezing are methods of food preservation which are used today.

Drying is a very old method of preserving food for future use practiced by our very remote ancestors. They dried corn, beans, peas, and apples by spreading them out in a dry, warm place. The attic of many an old farmhouse has been the scene of food-drying. At present, most food-drying is carried on commercially. Home-drying is not successful except in dry air.

Drying removes much of the water from the fruits or vegetables and preserves the food by drying up the organisms which would cause spoilage. Drying causes considerable change in flavor and some changes in food values. The principal dried foods available today are apricots, peaches, prunes, raisins, currants, prunes, navy beans, soybeans, and

TIMETABLE FOR CANNING NONACID VEGETABLES

KIND OF FOOD	HOW TO PREPARE	TIME TO PROCESS IN PRESSURE CANNER AT 10 POUNDS (240° F.)	
		PINTS	QUARTS
		<i>Minutes</i>	<i>Minutes</i>
Asparagus	Trim off scales; cut into inch pieces. Cover with boiling water; boil 2 or 3 minutes. Pack hot; cover with hot cooking liquid. Adjust lids. Process for	35	40
Beans	Fresh lima, shelled. Can only young, tender beans. Cover with boiling water; bring to boil. Pack hot; cover with fresh boiling water. Adjust lids. Process for	45	55
	Snap. Cut into pieces. Cover with boiling water; boil 5 minutes. Pack hot; cover with hot cooking liquid. Adjust lids. Process for . .	30	40
	Green soybeans, shelled. Cover with boiling water; boil 3 or 4 minutes. Pack hot; cover with fresh boiling water. Adjust lids. Process for	60	70
Beets	Can only baby beets. Before washing, trim off tops, leaving 1 inch of stem. Boil until skins slip easily—about 15 minutes. Skin and trim. Pack hot; cover with fresh boiling water. Adjust lids. Process for	40	45
	Pickled beets. See fruit and tomato canning table.		
Carrots	Scrape, slice. Cover with boiling water; boil 5 minutes. Pack hot; cover with hot cooking liquid. Adjust lids. Process for	40	45
Corn	Whole-grain. Cut corn from cob so as to get most of the kernel but not the husk. To each quart of corn add 1 teaspoon salt and 1 pint boiling water. Heat to boiling and pack hot. Add no more salt and no extra water. Adjust lids. Process for	65	75
	Cream-style. Too hard to process. Not recommended.		
Greens	Can only freshly picked, tender greens. Pick over; wash thoroughly. Cut out tough stems and midribs. Boil in a small amount of water, until wilted. Pack hot and loosely. Cover with hot cooking liquid; add boiling water if needed. Adjust lids. Process for . . .	95	105

KIND OF FOOD	HOW TO PREPARE	TIME TO PROCESS IN PRESSURE CANNER AT 10 POUNDS (240° F.)	
		PINTS	QUARTS
		<i>Minutes</i>	<i>Minutes</i>
Okra	Can only tender pods. Cover with boiling water; bring to boil. Pack hot; cover with hot cooking liquid. Adjust lids. Process for . . . Green, shelled. Cover with boiling water; boil 5 minutes. Pack hot; cover with fresh boiling water. Adjust lids. Process for Black-eyed, shelled. Same as lima beans.		
Peas		35	40
		45	...
Pimientos	See fruit and tomato canning table.		
Pumpkin	Peel and cut into 1-inch cubes. Add a little water and bring to boil. Pack hot; cover with hot cooking liquid. Adjust lids. Process for	85	105
Sauerkraut	See fruit and tomato canning table.		
Squash	Summer. Do not peel. Otherwise same as pumpkin. Winter. Same as pumpkin.		
Sweet potatoes	Boil or steam until skin slips easily. Skin; cut into pieces. Pack hot; cover with fresh boiling water. Adjust lids. Process for	100	110

Courtesy Bureau of Human Nutrition and Home Economics, U. S. Department of Agriculture

black-eyed peas. Some meats are preserved by drying: for example, dried beef. This is a modern version of the “jerked” beef and venison of pioneer days. In those times meat was preserved or “jerked” by cutting it in long, thin strips and drying it in the sun.

Canning is a familiar process of food preservation carried on extensively both in homes and in food factories. There are two general methods recommended for use in the home, the hot water-bath and cooking under pressure. The hot-water bath is best for tomatoes and acid fruits. The pictures and directions are given on pages 34 to 38.

Nonacid foods cannot be canned safely except in a pressure cooker. The vegetables, such as beans, peas, corn, or beets, should always be processed in a pressure cooker.

In using a pressure cooker, *always follow the directions given by the maker of the cooker.* Failure to follow directions may result in ruined food and possibly in a bad accident.



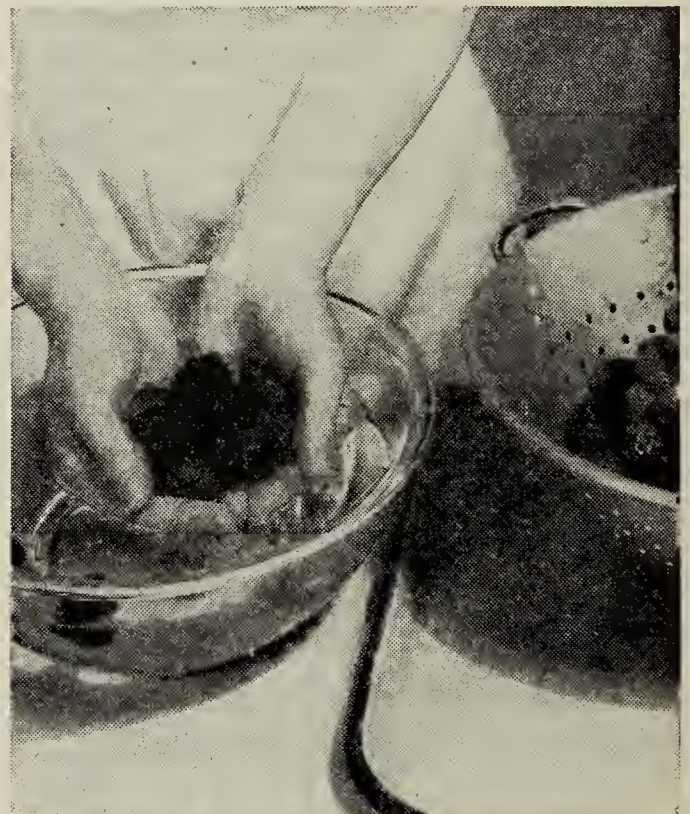
FREEZING STRAWBERRIES

Strawberries have better texture and flavor when sweetened with dry sugar before freezing. One cup of sugar with 5 to 8 cups of fruit gives good results. After adding the sugar, turn the berries over and over until all the sugar is dissolved and juice is formed for covering the berries when packed.

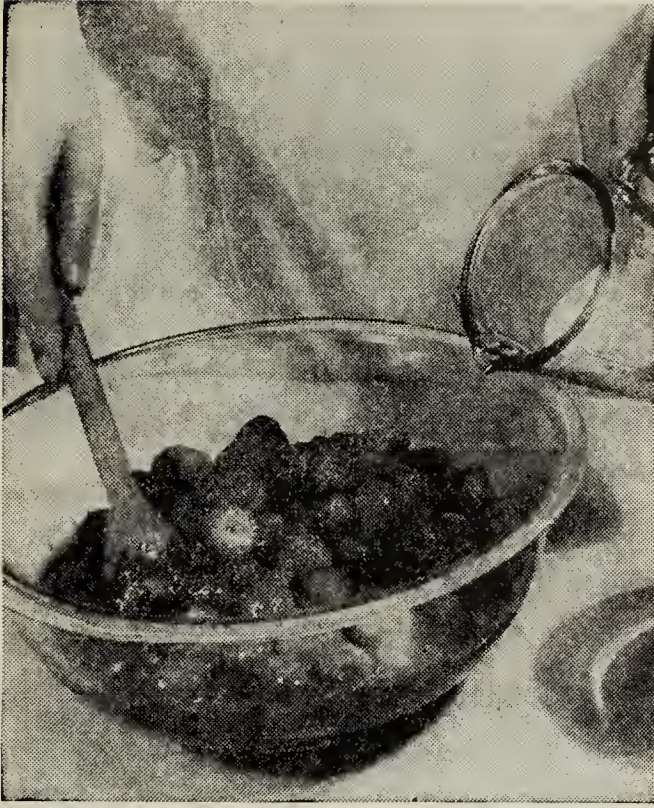
Bureau of Human Nutrition and Home Economics



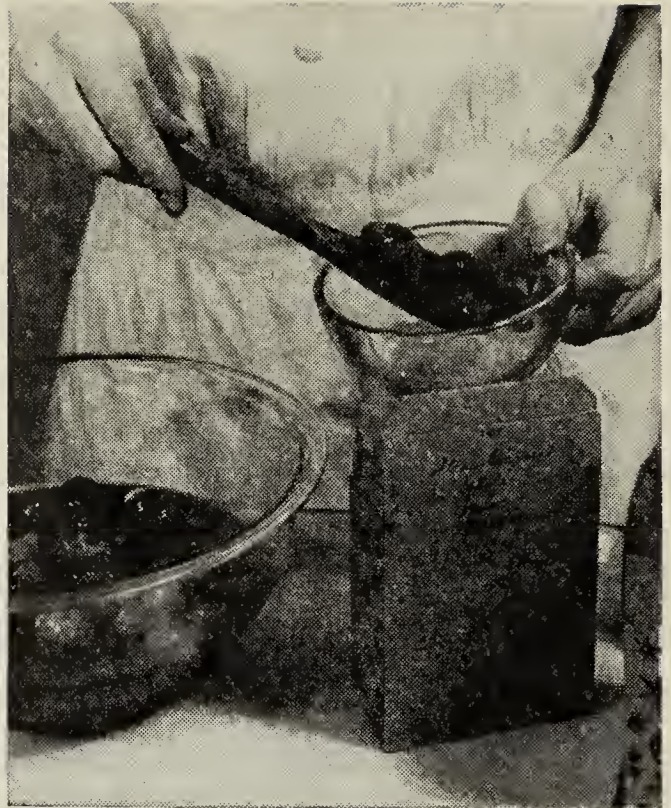
1. Carefully sort and cap strawberries. Do not use berries that are green, crushed, or overripe.



2. Wash berries, a few at a time, in cold water. Lift the berries from the water into a colander to drain.



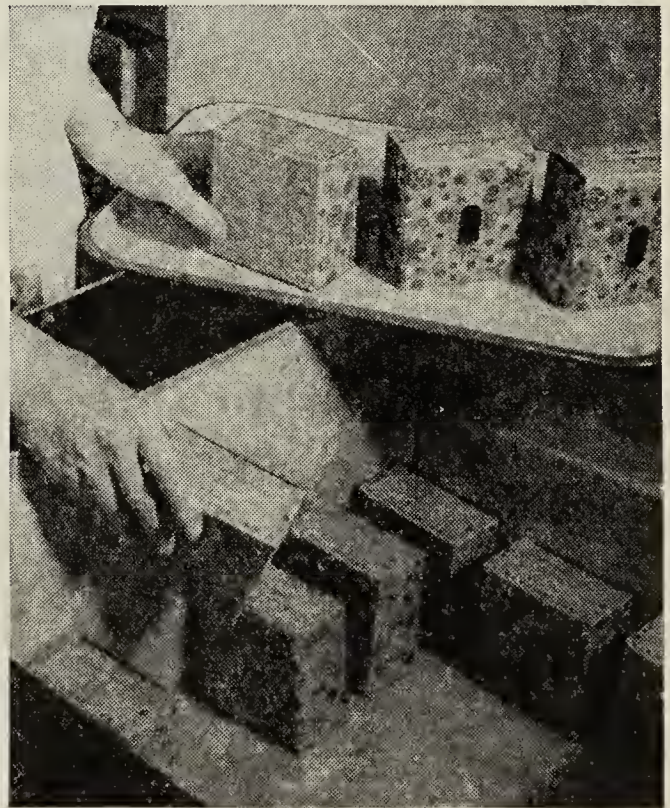
3. Mix whole or sliced berries with sugar, using 1 cup sugar with 5 to 8 cups of berries. Turn over and over until all sugar is dissolved.



4. Fill containers to within 1 inch from top. Cover berries with juice. If necessary, press down on berries with a spoon until juice covers them.



5. Wipe the inside edges of liner clean and dry. Press out air, and seal edges together with a warm iron. Label.



6. For rapid freezing, place boxes of berries against walls of freezing compartment, allowing space for air to circulate between packages. When frozen, store at 0° F. or lower.

Quick freezing is the most recently developed method of preserving fruits, vegetables, and other foods. This process is used both in homes and in commercial plants. The homemaker can procure frozen foods in three different ways: (1) by freezing them at home, (2) by purchasing them at a store, and (3) by renting a locker in a frozen-food locker plant and taking her foods there for freezing and storage. The illustration on page 480 shows one type of home freezer. Some models are designed for dual-purpose storage, with one compartment for deep-freeze storage and the other for ordinary refrigeration.

Frozen foods available at stores now include a wide range, varying from fruits and vegetables to French fried potatoes and apple pies. Strange as it may seem, you can order an entire packaged dinner from your dealer in frozen foods. With half an hour in the oven, dinner is ready. It may include such foods as chicken à la king, fish chowder, or roast beef and crispy rolls, cheese salad, and chocolate cake. Truly, this precooked, frozen, and packaged dinner has reduced home preparation of food to a minimum!

The frozen-food locker plant has become a nation-wide industry. In many communities it is now possible to rent a locker at one of these plants where the family can store fruits, vegetables, and meats for future use. In many plants, the foods are prepared for freezing by skilled workers. This type of food preservation is especially useful for families that have their own gardens and orchards and butcher their own meat. The fresh foods are taken to the locker plant whenever they are in the best condition for good eating.

Points on successful freezing. Quick freezing is the easiest method of preserving food for future use, but it is not a miracle process accomplished by waving a wand. Care must be taken to process the foods correctly, or an inferior product will be the result. The points given below apply equally to foods frozen at home, in locker plants, and by commercial firms.

1. Select fruits and vegetables that can be frozen successfully. Tomatoes (raw), lettuce, celery, and cabbage are not well adapted to this method of preservation.

2. Select the best variety of each of fruit and vegetable for freezing. For instance, Alderman peas, Kentucky Wonder pole beans, Buttercup squash, J. H. Hale peaches, and Dorsett strawberries are varieties which are well adapted to freezing. If you intend to freeze your produce, find out which varieties will give best results.

3. Choose fruits that are fully ripe and vegetables that are exactly



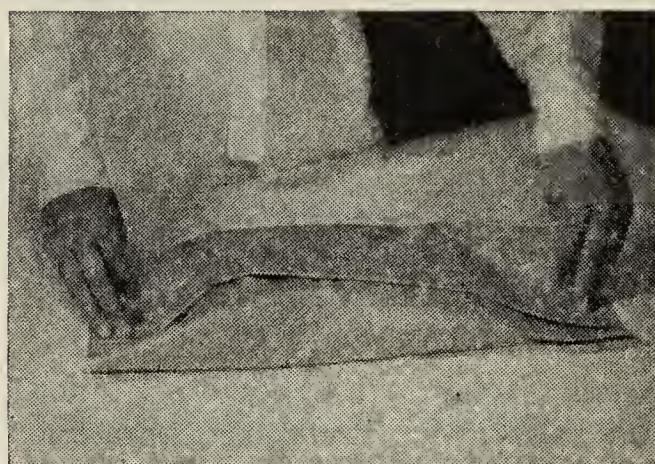
THE PROTECTIVE WAY TO WRAP MEAT FOR LOCKER STORAGE

1. With glossy side of wrapper as inside surface, place meat in center of sheet.

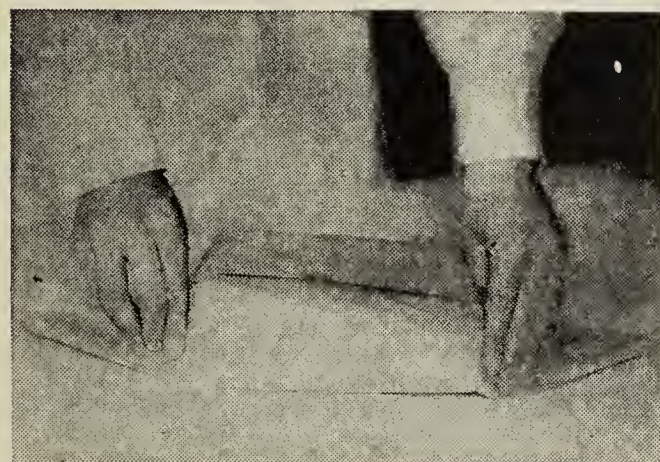
Marathon Corporation



2. Bring opposite edges of sheet together. Fold down in series of folds until paper is in direct contact with meat.



3. Fold ends of sheet carefully, avoiding air pockets by "fitting" the wrapper close to the meat.



4. Make pointed end folds, pressing wrapper close to end surface.



5. IMPORTANT: Turn end folds *under* the package for extra protection. Seal with locker tape or tie with string.



Westinghouse Electric Corporation

A home freezer unit provides a quick and satisfactory method of preserving garden-fresh vegetables for winter use.

right for eating quality. You cannot get better quality out of your freezer than you put into it.

4. Rush the fruits and vegetables from the garden to the freezer. Progressive commercial processors do not allow more than two hours to elapse from field to the freezer. Peas which stand for 3 or 4 hours in a warm room deteriorate considerably in flavor and vitamin C content.

5. Scald or blanch vegetables in small quantities, no more than one pound at a time, so as to assure good heat penetration.

6. All frozen foods should be wrapped in *moisture-proof* and *vapor-proof* material in order to prevent the loss of quality. This is the most important step in home freezing. If the packages are not "wrapped right and sealed tight"

the foods will dry out, wither, toughen, and lose color. Directions for packaging strawberries and meat are given on pages 476 and 477.

7. Packages of frozen food should be no larger than will be used at the time the container is opened.

8. The first freezing should be done at a temperature well below zero and in a compartment which provides rapid air movement or contact of the package with the freezing surface. Speed in freezing is extremely important. Storage temperatures should be maintained at about 0° F. *Frozen foods which have been thawed should never be refrozen and used later.*

Quality, time, and cost should be considered. The most food for the least money is an important question to consider in preservation by any method. There are many factors involved, but common sense and simple arithmetic will give the right answer.

Whether you will can food for future use, freeze it at home, rent a cold-storage locker, or buy it already cooked and frozen depends on existing conditions.

1. Do you have a supply of good-quality fruits and vegetables from your own garden? Can you buy them at reasonable prices which will make it worth while to can or freeze them? It is not economical to pay high prices which will bring the cost of your own product up to nearly the same level as the commercial product.

2. Is your time an important consideration? If you have very little time for canning or freezing foods, it may be more practical to buy your fruits and vegetables already processed.

SUGAR SIRUPS USED FOR CANNING AND FREEZING ¹

CONCENTRATION OF SUGAR SIRUPS

TYPE OF SIRUP	AMOUNT OF SUGAR	AMOUNT OF WATER	PER CENT OF SUGAR
Very thin.....	1 part	4 parts	20
Thin.....	2 parts	4 “	30
Medium.....	3 “	4 “	40
Heavy.....	4 “	4 “	50

USE OF SUGAR SIRUPS IN CANNING

FRUIT	TYPE OF SIRUP
Apples	Thin
Apricots	Medium
Berries	Medium or heavy
Cherries	Medium
Figs	Medium or heavy
Grapefruit	Medium
Grapes	Thin or medium
Peaches	Medium or heavy
Pears	Medium
Plums	Medium or heavy
Prunes	Medium
Rhubarb	Thin or medium

Suggestions

For flavor, add ¼ to ½ t. salt per quart jar.
Allow about ⅔ to ¾ cup sirup per pint jar or 1 to 1½ cups sirup per quart jar.

Sweetening and Preserving Agents for Canning Fruits

1. Refined, granulated cane or beet sugar (sucrose) is the sweetening agent most commonly used.
2. Corn sugar (dextrose) may be used in a light or medium sirup. Best proportion is 3 parts of sucrose to 1 part of dextrose.
3. Corn sirup may be used in proportions of ½ cup light corn sirup and 1 cup sucrose to 2 cups of water. One part corn sirup to 2 parts water is similar in consistency to medium sirup, but is only as sweet as a thin sirup. For sweetness, 2 cups of corn sirup equal about 1 cup of sucrose.
4. Honey may be used in proportions of ½ cup honey and 1 cup sucrose to 2 cups of water for medium sirup. Any higher proportion of honey may cause darkening of fruit and a pronounced honey flavor.

¹ From *Handbook of Food Preparation* by the American Home Economics Association.

3. How much will you save by canning or freezing your food supply? When estimating the cost of home-processed foods, include the following items: cost of the food, cost of sugar and other ingredients, cost of equipment—such as jars, caps, rubber bands, pressure cooker, and freezer, and cost of heat for hot-water bath or cooker or cost of operating home freezer.

If it is necessary to buy jars and a pressure cooker, the cost should be spread over a number of years, unless one intends to use them for only one season. The expenditure for a home freezer is large, and the monthly operating cost adds to the price you pay for your frozen foods.

If you are short on time, the answer may be a home freezer or the purchase of commercially frozen or canned food. On the other hand, if you are short on money, the sensible thing may be a pressure cooker and a garden.

CLASS ACTIVITIES

1. Obtain prices for home freezers, their operating costs per month, and their capacity in quarts or pounds. Estimate the cost of this equipment per year over a period of ten years.

2. Estimate the cost per quart for processing a bushel of peaches in a hot-water bath if the peaches cost \$4.00 per bushel and the yield is 24 quarts. Estimate the cost of the sugar at the current price per pound and the heat at current prices in your community.

3. Make a list of the ways in which leftovers can be used. Include only those suggestions which are not listed on pages 471 and 472.

4. Make jelly, preserves, marmalade, or pickles as an extra project in food preservation.

5. Visit a food-locker plant if possible.

6. Investigate the kinds of frozen foods sold in your stores. Arrange a class project in which these foods are judged for quality.

7. If possible, buy a packaged frozen dinner and prepare it in the school kitchen. Judge it for quality.

3. *Balance them both: diet and budget*

A balanced diet is essential for health and happiness, but how to keep it balanced on a limited income presents another problem. Keeping expenditures balanced with the money available for food and, at the same time, providing an adequate diet constitutes a double-headed problem which challenges the ingenuity and skill of the homemaker-manager.

The basic seven at any income level. An easy and practical way of securing a well-balanced diet is achieved by selecting foods from each of the seven basic food groups. High-cost and low-cost foods are included in each of these groups. The twin problems of a balanced diet and a balanced budget on a limited income can be solved by selecting the less expensive foods in each group.

Low-cost meals need be no less nutritious than high-cost meals. A wide variety of foods is available at varying price levels. The thinking homemaker-dietician-manager can plan tasty, nourishing, and attractive meals on a very limited budget. Of course, there is a minimum below which it is not possible to provide an adequate diet, but above this minimum the intelligent homemaker can plan good meals which will please her family's appetite and give them all the essential nutrients.

The usual mistake in the low-cost diet is to spend too much on the energy-rich and hearty foods and to omit the protective foods. For instance, it may seem to the homemaker that she must get as much hunger-satisfying food as she can for her food money, and so she spends it for potatoes, bread, and cereal foods and does not include vitamin- and mineral-rich foods such as citrus fruits, green and yellow vegetables, or milk. We know from our study of nutrition that this is a serious error which will lead to malnutrition.

Tips on moneysaving meals. Here are some practical suggestions for really low-cost meals which are appetizing and healthful.

1. Use fortified margarine instead of butter.
2. Use tomato juice instead of citrus juices.
3. Use whole fruits instead of juices.
4. Use evaporated milk instead of fresh milk for cooking.
5. Use the less expensive protein foods such as fish, cheese, soybeans, dried legumes, and cheaper cuts of meat.
6. Use meat extenders such as bread crumbs, cereals, or chopped vegetables in hamburgers and meat loaf.
7. Have meatless meals with such main dishes as macaroni and cheese, egg dishes, Spanish rice, soy and bean loaf, or a casserole of mixed vegetables au gratin.
8. Instead of lettuce, have cabbage or other less expensive salad greens.
9. Instead of lettuce for salad garnish, use celery leaves.
10. Instead of apple pie or pumpkin pie, have Brown Betty or pumpkin cup-custard.
11. Be thrifty with leftovers, as discussed earlier in this unit of study.

National nutrition is important. Just as your personal nutrition is a matter of the gravest concern to yourself, so is the nutrition for all Americans a serious matter to the nation. Nutrition is a national problem of great importance. Adequate diets build good health, and good national health contributes to the strength, vitality, and prosperity of the country. Poor diets mean illness, inability to work, susceptibility to disease and accidents, and general fatigue.

During World War II, national nutrition was considered of such importance that the government made a great effort to educate all people to eat a well-balanced diet. Good nutrition is no less important in peacetime to you personally or to the whole nation.

Investigations have shown that only about one fourth of all the people in the United States have adequate diets. About 38 per cent of the families have a diet which might be rated fair, and more than a third of them have poor diets. Not all the families with good diets have the larger incomes, and not all the families with poor diets have low incomes. This points to the fact that *learning how to select a balanced diet* is more important than an unlimited food budget. Of course, it is easier to secure an adequate diet when you have plenty of money to spend, but it does not relieve you from your responsibility of selecting the right foods for health and happiness. Education in nutrition is the only guarantee that you as an individual or the nation as a whole will strive for an adequate diet.

Here are some changes in the nation's eating habits between 1909 and 1945. Many of these changes were undoubtedly due to better understanding of nutritional needs, although some were the result of economic factors.

1. We ate $4\frac{1}{2}$ times as much citrus fruit in 1945 as in 1909.
2. The consumption of tomatoes rose about 33 per cent, mostly since 1936.
3. In 1945 we consumed 257 quarts of milk and milk products (except butter) per person as above 169 quarts in 1909.
4. Consumption of both canned and fresh green and yellow vegetables rose greatly during this period.

CLASS ACTIVITIES

1. Plan menus for your family for one week on a low-cost basis. Be sure to plan a balanced diet every day.
2. Plan the family meals for one week based on a moderate-cost diet.
3. How can an adequate diet be built around the racial food customs of a

family living in this country? Illustrate how this can be done with the meal patterns of your own family or a family that you know.

4. Discuss moneysaving tricks for low-cost meals. What suggestions are offered by members of the class? Consult the local Red Cross chapter or other agency for material on nutritious, low-cost meals.

5. Write a play about the effect of an improved diet on family life.

A SUMMARY OF YOUR STUDY OF MORE FOOD FOR LESS MONEY

Study of this unit is intended to show how a balanced diet can be secured at minimum cost. Can you give a brief discussion explaining how each of the topics listed below is important in reducing food costs?

Food-buying problems

Securing a balanced diet in low-cost and moderate-cost meals.

Type of food preservation most economical for the family.

Use of leftovers.

Planning moneysaving menus.

Buying techniques

Judging qualities by appearance.

Reading labels.

Estimating costs of canned or packaged goods per ounce.

Use of buying aids, such as grade labeling, seals, etc.

Food skills

Canning nonacid vegetables in the pressure cooker.

Quick freezing for home storage.

WHAT DO YOU KNOW ABOUT GETTING THE MOST FOOD FOR THE LEAST MONEY?

Check your understanding of food-buying problems by trying to answer the following tests.

To test your understanding of the buying problem

Which of the ideas expressed below are involved in getting the most food for the least money? On a separate sheet of paper write the number of each term or statement, and opposite the number write the correct answer. **Do not write in this book.**

1. The seven basic food groups.
2. Quantity is the chief consideration.
3. Always select the best quality.
4. Cook exactly enough, with no leftovers.
5. Food preservation.
6. Federal Food, Drug, and Cosmetic Act.

7. Meal patterns to fit family preferences.
8. Repeat the same meal patterns every week.
9. A balanced diet.
10. Leftovers can be moneysavers.

To test your knowledge of hidden values

Which of the following statements are true and which are false? On a separate sheet of paper write the number of each statement and the word "true" or "false" after it. **Do not write in this book.**

1. The Federal Food, Drug, and Cosmetic Act requires a statement of the amount of the contents in a package to be printed on the label.
2. The Federal Food, Drug, and Cosmetic Act requires an exact statement of quality on all canned goods.
3. If canned foods fall below the minimum standard quality established by the government, they must be labeled to indicate this substandard quality.
4. A shield-shaped label bearing the letters A. M. A. means that the food was processed by the American Medical Association.
5. U. S. Grade A means that the food is top grade and processed under continuous inspection by a United States Government food expert.

REFERENCES FOR FURTHER READING

- Boren, Lyle H., *Fables in Labels*. National Capital Press, Inc., 1939.
- Brindze, Ruth, *How to Spend Money*. The Vanguard Press, Inc., 1935. Pp. 185-285.
- , *Johnny Get Your Money's Worth. (And Jane, Too)*. The Vanguard Press, Inc., 1938. Pp. 35-80, 168-221.
- Trilling, M. B., and Nicholas, F. W., *You and Your Money*. J. B. Lippincott Company, 1944. Pp. 1-131.

Bulletins and pamphlets

- Containers for Fruits and Vegetables*. Farmers' Bulletin No. 1821. U. S. Department of Agriculture. Superintendent of Documents, Washington, D. C. 10¢
- Dairy Products*. Better Buymanship Series. Household Finance Corporation. 919 N. Michigan Ave., Chicago.
- Family Nutrition*. Philadelphia Child Health Society. 311 S. Juniper St., Philadelphia 7, Pa.
- Fruit and Vegetable Buying Guide for Consumers*. U. S. Department of Agriculture, Washington, D. C. Miscellaneous Publication No. 167.
- Fresh Fruits and Vegetables*. Better Buymanship Series. Household Finance Corporation. 919 N. Michigan Avenue, Chicago.

Freezing Foods for Home Use. University of Minnesota. Agricultural Extension Service, U. S. Department of Agriculture. University Farm, St. Paul 8, Minnesota.

How to Get the Most Out of Your Home Freezer. Household Refrigeration Section. National Electrical Manufacturers Association. 155 E. 44th St., New York 17, N. Y.

Meat. Better Buymanship Series. Household Finance Corporation. 919 N. Michigan Avenue, Chicago.

Money-Saving Main Dishes. Office for Food and Feed Conservation with cooperation of Bureau of Human Nutrition and Home Economics, U. S. Department of Agriculture, Washington, D. C. April, 1948.

Poultry, Eggs, and Fish. Better Buymanship Series. Household Finance Corporation. 919 N. Michigan Ave., Chicago.

Read Your Labels. Public Affairs Pamphlet. Institute for Consumer Education. Public Affairs Committee, Inc. 30 Rockefeller Plaza, N. Y.

Stretching the Food Dollar. Household Finance Corporation. 919 N. Michigan Avenue, Chicago.

11

Food Makes the Party

Food helps to make the party. Whether it is a formal banquet with five courses or a simple tea party with plain sugar cookies, food helps to create a festive atmosphere for the occasion. Breaking bread together always helps people to feel friendly, happy, and satisfied with the world. Of course, it takes more than food alone to produce a successful party. There must be something interesting to do, people who are congenial, and pleasant hospitality. However, food can do much to promote the party spirit.

Everyone likes a party. Perhaps you have more fun at some kinds of parties than others, but, if you are an average person, you cannot help but enjoy such social affairs. Since no one would wish always to be a guest, it is important to learn to be a good hostess. This is one more phase of the multiple-sided homemaking job.

A good hostess has mastered the technique of giving a good party without an unreasonable expenditure of time, effort, or money. She knows that a little ingenuity in planning food and entertainment are better than expensive refreshments, favors, and decorations. She is able to enjoy the party herself and to see that her guests enjoy themselves.

There are many kinds of parties, and in each case the food should be suited to the type of party. Dainty tea sandwiches are not well chosen for a picnic party, and hamburgers are not suitable for a formal tea party. Whatever the party—family dinner on Christmas Day, buffet luncheon for twenty guests, informal Sunday night supper, high tea, or Halloween masquerade dance—the food should harmonize with the spirit of the occasion. Favors, table decorations, style of service, and other accessories should be planned to add zest and gayety to the party.

1. Teas, luncheons, and suppers: formal and informal

Good parties are fun, but they do not happen by accident. Preliminary planning is necessary to insure the success of any party except, of course, those which are held on the spur of the moment. This does not mean that elaborate preparations requiring much time and effort should precede every party, but that a definite plan of organization is needed in order to keep the party going smoothly and pleasantly. The hostess who plans ahead saves herself a great deal of last-minute rush and confusion.

Party plans should include all details. What kind of party to have, when to have it, whom to invite, what form of invitations, what type of entertainment, what kind of food, and how to serve it are important considerations in planning. Detailed plans for refreshments should also include marketing for supplies; schedule for food preparation; service of china, silver, and linens; table decorations; scheme for serving; and clearing up afterward.

Skillful managers avoid decorations and foods which require unreasonable amounts of time and effort. For example, if you are serving an Easter morning breakfast to twenty people, you should not try to serve them with waffles or to give out favors which require an hour to make for each one. Simplicity need not detract from the taste-appeal of the food or the eye-appeal of the table.

In this problem we shall discuss plans for teas, luncheons, and supper parties. You should learn how to give this type of party at home and how to take your share of responsibility when your home economics class gives a party.

Watchwords for party plans can be summed up as follows:

1. Entertain the easy way.
2. Make a time schedule for all tasks.
3. Have good food but not too many kinds or too fancy.
4. Remember that a simple but clever idea is better than hours of fussy and elaborate preparations.
5. Have a definite plan for food and entertainment.

The casual or informal tea. Tea with light refreshments in the late afternoon is a pleasant custom. Not many people in the United States stop for a daily cup of tea but in England it is a universal habit. In this country a "tea" means an afternoon party which may be either small and informal, or large and formal.

Many people, when their working hours permit, like to share a



Langley High School, Pittsburgh Public Schools

A casual afternoon tea party is a pleasant interlude either at home or at school.

friendly hour of relaxation in companionship with others. Sunday afternoon is a good time for a casual tea party, and many hostesses find this is the most satisfactory time to ask a few friends to drop in for a pleasant chat.

Invitations to a casual tea should be informal. They may be extended by means of a telephone call or a note. If you see the friend whom you wish to invite, you might say, "Won't you come in next Sunday afternoon about five o'clock for a cup of tea? We could have a nice chat." You might also say, "Joan Craig will be there and I think you would enjoy knowing her." If you extend your invitation over the telephone, speak in the same casual and natural way. Avoid being stiff or affected. If you write your invitation, make it sound as though you were speaking instead of writing.

When you receive this kind of invitation, reply in the same manner. If you can accept, say, "Thank you! I would like very much to come," or reply in similar words. If you must refuse, say, "I am so sorry. I have promised to do something else." If you wish, you can explain what prevents you from accepting. Do not be profuse in accepting or rejecting an invitation, repeating yourself over and over again. Make a simple response, and make it sound sincere.



Kellogg Company

Cakes, cookies, or wafers which can be eaten with the fingers are suitable for an informal tea party.

Refreshments for the informal tea are very simple. The “tea” may very likely be hot tea served with lemon, cream, or sugar as the guest prefers, or it may be coffee if the hostess knows that this will please her guests. On warm days, iced tea or coffee, fruit drinks, or milk drinks may be used.

Food accompaniment for the “tea” at an informal party should not be elaborate or heavy. A tea party is not intended to take the place of a heavy meal. Cookies, small cakes, or small sandwiches are suitable. Sometimes, the hostess may wish to add candies or nuts to the simple menu. The illustration above shows attractive and simple refreshments for a tea.

Serving the informal tea should be as simple as the refreshments. Generally, the hostess brings the dishes, silver, and food to the living room or porch on a tray. She may put the things upon a coffee table and serve them, or she may use a card table. Notice the simple and delightful cover and napkins used in this tea service. A teen-age daughter may help to serve her mother’s friends by arranging the tea tray and



Ann Pillsbury, Pillsbury Mills, Inc.

Flowers and candles give a festive and elegant touch to the formal tea table.

bringing it in at the proper time. If the daughter of the house is entertaining her club friends, she should not expect an undue amount of help from her mother. As a junior homemaker she should be able to take charge of the refreshments at her own parties and be ready and willing to assist other members of the family when they entertain.

Informal teas for large groups. The type of tea party which we have been discussing is well adapted to a small group of people in a home, but there are occasions when the informal tea seems suitable for a large group. For example, the Future Homemakers of America or a Y-Teen club might wish to have informal tea refreshments at an after-school meeting. An afternoon meet-

ing of the Parent-Teacher's Association might be entertained at an informal tea by a home economics class.

In the case of an informal tea for a large number of people, it is obviously impossible to bring the tea things on a tray. Probably, the best plan is to arrange the chairs so that the guests may sit in groups. The girls will bring trays holding cups of tea, sugar, lemon, cream, and cookies or cakes to each group. The grouping of chairs is much better than a large circle where each person can see everyone else but can speak only to the person on the right or left. People are inclined to feel self-conscious and conspicuous when sitting in the big, formally arranged circle.

The large, formal tea is a social occasion. The points of difference between the small, informal tea and the large, formal tea are: the purpose of the party, the style of the invitation, the number of people invited, the manner of receiving and entertaining guests, the kind of food, and the service. At the casual tea, a few people have an opportunity to become well acquainted and old friends can have personal and intimate conversation, but the formal tea is a social occasion where one meets many people briefly for gay and pleasant talk. Often, the formal

tea is an occasion for introducing a house guest to one's friends, to welcome a newcomer, or to announce an engagement. A club may give the tea to welcome new members or to honor old members. A home economics class may entertain their mothers or a group of teachers at a formal tea.

Invitations for the formal tea should be written in longhand, using the third-person, formal mode of expression. The reference books listed at the end of this unit will show you how to write a formal invitation when you need to do so. Invitations which suggest that you may come at any time during the hours indicated do not require an answer as does the casual invitation which asks you to come at a definite

time. In the case of the formal tea you are not expected to come at the opening hour and stay until the party is over. Instead, you may go at any time during the party hours, stay 15 to 30 minutes, and depart.

If you receive an invitation with R.S.V.P. on it, you should reply as soon as you can. R.S.V.P. means "Please reply." The letters stand for the French words *Répondez, s'il vous plait* which means literally, "Respond, if you please."

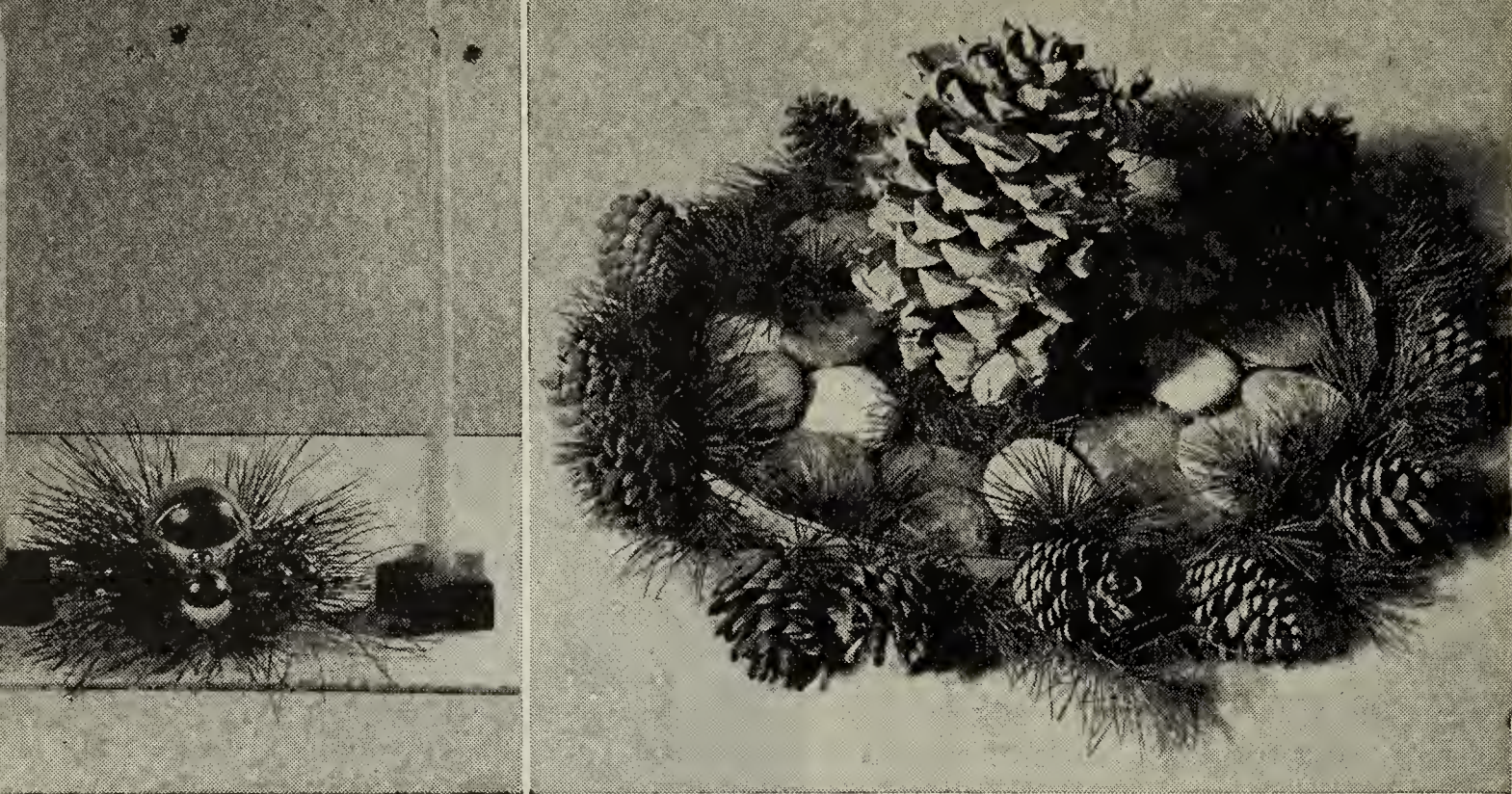
The refreshments at a formal tea should be more elaborate than those at the informal tea. The usual menu includes tea and coffee, dainty sandwiches, olives, nuts, and candies. The sandwiches may be plain, open-faced, ribbon, or pinwheel. Fancy shapes and garnishes, such as those shown on page 503, are gay variations of the decorative sandwich. Remember that the refreshments served at teas are not intended to serve as hunger-satisfying meals!

The food at a formal tea is served from a tea table, which is usually the dining table pulled out to its full length. The tea service, consisting of a tea pot or urn, sugar bowl, cream pitcher, and plate with lemon slices, is located at one end of the table. The cups and small plates (better than saucers) are arranged conveniently near at hand. The friend



Ann Pillsbury, Pillsbury Mills, Inc.

Guests at a formal tea are served by the assistant hostess who has been asked to pour.



Sunset Magazine

Candles, evergreens, Christmas tree ornaments, and winter berries can be combined in many intriguing table decorations.

whom the hostess has asked to “pour” sits at the end of the table and fills the cups as needed. Usually, a similar service for coffee is arranged at the other end of the table.

Guests at a formal tea usually find their hostess near the door ready to greet them. She may have the guest of honor or a member of her family at her side. After the guest has presented herself to her hostess, she should mingle with the other guests, talking with her friends and meeting other guests whom she does not know. She should not wait for a special invitation to go to the dining room but, after a short time, should find her way to the tea table. There she may go directly to the tea table for her tea and other refreshments. Or she may find that an assistant hostess will escort her to the table and introduce her to those who are pouring if she does not already know them. One of these aides will probably offer more sandwiches, candies, and other dainties to the guests as they drink their tea. A helper, a younger member of the family, or other aides should take the plates and napkins when the guests are finished with them, and remove them to the kitchen.

Special pains should be taken to make the tea table as beautiful as possible. The hostess will bring out her best china, silver, linens, and other decorative accessories. A lovely flower arrangement for the tea table is very important, for, without it, the table lacks the elegant and festive air which it should have. Do not think that a formal tea can be held only in a large house magnificently furnished. A pretty tea table with immaculate linens, sparkling glasses, and gleaming silver, domi-



The Towle Silversmiths, Newburyport, Massachusetts

This buffet table has been laid for a service where each guest will help himself to napkin, silver, china, and food.

nated by a gorgeous centerpiece, radiates an air of elegance in any room. The flower piece need not be expensive but should be arranged with taste. A profusion of garden flowers—roses in June, asters in the fall, and jonquils in early spring—can be used with great success. Arrangements for tea tables need not be as low as for dinner tables because the guests are not seated at the table. Evergreens, winter berries, candles, ceramics, or other accessories can be used very effectively. The arrangements illustrated on page 494 are delightful and are equally well suited to the dinner table or tea table during the holiday season.

Candlelight always lends glamor to a party scene. The usual tea party is often given late in the afternoon when daylight is fading. To have lighted candles on the tea table adds warmth and a friendly atmosphere to the occasion.

Buffet suppers and luncheons. Buffet service, which is really a home adaptation of the method of serving meals in cafeterias, is especially well suited to high teas, suppers, and luncheons when the hostess has no help or when the number of people is too great for seating at the dining-room table. There are several variations of the buffet-style service.

CLASS PROJECT: ENTERTAIN GUESTS AT A TEA, BUFFET SUPPER, OR SEMIFORMAL LUNCHEON.

Your class will entertain a group of people at a party.

1. The whole class should make plans together for the type of party, the group to be invited, the form of the invitations, the menu, details of the service, and the clearing up afterward. Then each group in the class will be assigned a special job.

2. Make a time schedule which includes the hour set for the party; delivery of the invitations; checking up on china, silver, and linens; shopping for food; arrangement of centerpiece; arrangement of settings on the table; preparation of the food; serving the meal; and clearing up.

3. After the party is over, discuss its success. Did the preparation and serving of the food go smoothly? Was the table attractive? Was the party gay and happy or stiff and solemn? How can you improve your party technique in the future?

1. The meal is served from the buffet. Guests help themselves and take their food to the dining-room table. This type of breakfast service is everyday standard practice in England.

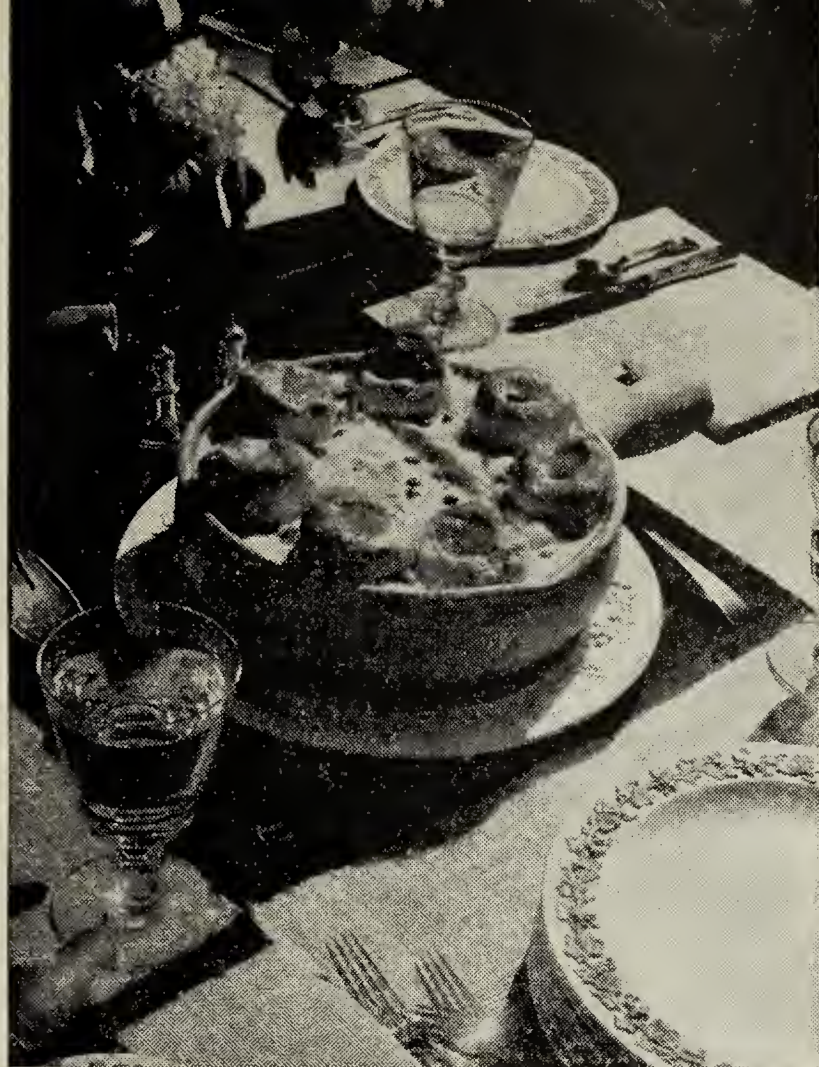
2. The meal is arranged on the dining-room table, where the guests may select their food and eating implements. After having served themselves, the guests go to small tables which have been set up in the living room, on the porch, or on the terrace. This scheme is often used for bridge parties.

3. Guests may serve themselves at the buffet table, or the hostess may serve one of the foods as the people move around the table.

4. Generally, the food is placed upon the buffet table in large serving dishes according to the plan illustrated on page 495. However, it is sometimes advantageous to serve the food on individual plates instead of expecting guests to help themselves.

5. When the buffet meal includes a dessert course, either of two plans may be followed. The hostess and her aides may remove the used plates and bring the desserts to the guests, or the guests may be asked to bring their supper plates to a special table in the dining room and get their desserts from the buffet table. This latter plan means that the dessert will be arranged on individual plates while the guests are eating their suppers.

Buffet meals should be carefully planned. This type of meal must be planned with just as much care as any other kind of service. The fact that guests wait on themselves to some extent does not mean that pre-



Good Housekeeping Institute

Steps in serving a guest luncheon when the hostess has no helper in the kitchen.

liminary plans can be slighted. In order to have the meal go smoothly and have it enjoyed thoroughly by both the hostess and her guests, every detail must be planned with an eye to convenience for the guests, good food, and a general festive effect.

1. Plan a menu which is suitable for buffet service. If the guests are to help themselves from the service dishes, the foods should be easy to take with a spoon or fork. Meat should be sliced and salads easy to spoon from the bowl. For most salads both a fork and spoon should be provided for serving. See the illustration on page 495.

2. Plan the route around the service table by which the guests will secure their food. Naturally, the plates should come before the foods which are to be placed upon them. Do you think silver and napkins should be picked up from the table first or last on the line of march? Why? Beverages, first or last?

3. Provide a convenient place for guests to eat. If small tables are not used, plan so that some kind of table space is near each seat. People cannot enjoy lap suppers if they must park their beverages and water glasses on the floor. Small individual trays are sometimes used to solve this problem.

Luncheon and supper parties can be fun. Sunday night suppers, luncheons followed by bridge, and suppers after hay rides, skating, or badminton games can be very jolly. Buffet service, informal style of service at the table, or sometimes a semiformal style are most popular. Not many people care to use a truly formal style of service either for family or company meals.

The hostess without a maid can serve a very delightful luncheon entirely alone or aided by one of her guests. Or a junior member of the family may act as waitress and bring the plates which are served from the kitchen.

The details of serving a guest luncheon for six are shown in the series of illustrations on page 497. Cocktails of pineapple and lime juice were served in the living room, thus eliminating one course at the table. The table-setting was simplified by using plates large enough for the chicken pie, the tossed vegetable salad, and for the assorted breads, making bread-and-butter plates unnecessary. The regular knife was used for buttering the bread, thus eliminating butter spreaders. The chicken casserole was in place before the hostess when the guests came to the table. She served each guest by passing the plates from hand to hand. Next, the bread and pickles were passed by the guests. The bowl of salad had been placed at the end of the table opposite the hostess. When

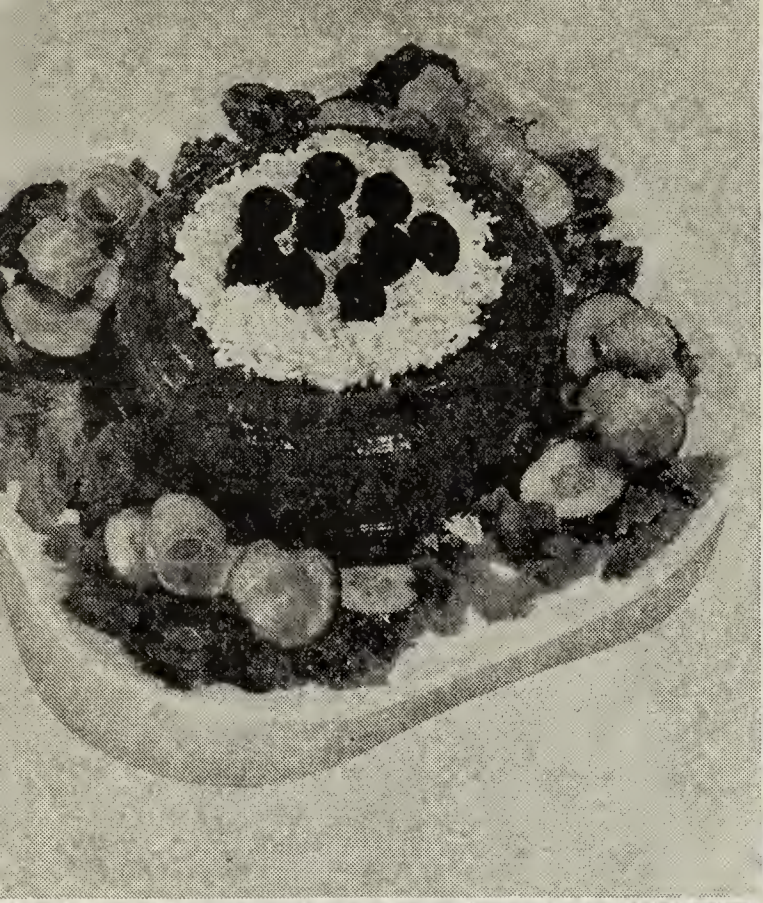
all the guests had been served, the salad was passed and each guest helped herself. The tea service was placed on a small table near the right hand of a guest as shown in the illustration at the upper right. She poured the tea and passed it to each of the other guests.

After the main course was finished, the hostess arose from her chair and removed the service dishes, including the casserole, salad bowl, bread basket, pickle dish, and salt and pepper shakers. Next, she removed the used dishes from each place, using her right hand to lift the large plate and her left hand for the salad plate. See the picture at the lower left. Notice that no bread-and-butter plates or butter spreaders were used, thus eliminating steps in setting the table and in clearing away afterward. These pieces of equipment were not necessary for this luncheon because the salad plate was large enough for the bread and the long knife could be used for the butter. Instead of taking a separate trip to the kitchen for each handful of dishes, steps were saved by placing them on a serving table near the kitchen door. The plates and silver were stacked on a tray as shown in the picture at the lower right. The dessert plates, waiting in the kitchen, were brought in by the hostess and placed in front of the guests. The advantages to the hostess of using this type of service are obvious. It permits her to enjoy conversation with her guests without frequent interruptions caused by her jumping up to bring something to the table or to take used dishes to the kitchen. Much work was eliminated by clever planning and much of it was done before the guests arrived, thus leaving her free to relax and pay more attention to her guests—a serene but efficient hostess.

A clever centerpiece always helps the party. Table decorations which provide a bit of amusement or something to talk about help to create the gay, party spirit. The charming little ceramic figures shown on the buffet table on page 495 deserve attention from the guests.

Clever, two-in-one centerpieces are shown in the photographs on page 500. With these, you can have your centerpiece and eat it too! The vegetable-relish bowl shown in the bottom picture is made by pushing crisp sticks of raw beets, carrots, turnips, celery, green peppers, and cucumber into a bowl of finely crushed ice. Radish roses and cauliflower clusters add to the gay and colorful effect.

The jellied tomato ring at the top left is filled with riced cottage cheese and is topped with ripe olives. It rests on a bed of green escarole and is garnished with unpeeled cucumber slices and carrot curls. Both the vegetable-relish bowl and the jellied tomato ring should be arranged just before serving.



Woman's Day

Top left: Jellied tomato ring, filled with riced cottage cheese, will grace the table until time to eat the salad. The ring is unmolded onto a bed of green escarole with garnishes of unpeeled cucumber slices, carrot curls, and black olives. Dip the olives into salad oil to keep them shiny.

Top right: Dessert cheese arrangement will stand up beautifully all during dinner. Shown in the photograph are bleu and process cheddar cheeses, assorted crisp crackers, raspberry jam, and pear slices. (Apples may be used. Be sure to dip fruit in lemon juice to retard discoloration.) For an extra touch a few geranium leaves were placed under the fruit. Leaves from other flourishing house plants will do: ivy, philodendron, etc.

Bottom: Vegetable relish bowl serves as decoration, relish, and salad. Push into a bowl of finely crushed ice crisp sticks of raw beet, carrot, turnip, cucumber, and green pepper; radish roses and cauliflowerettes; and celery and scallions. Wait until about serving time to make the arrangement.



The dessert cheese arrangement in the top right picture includes raspberry jam, crisp crackers, bleu and cheddar cheeses, and pear slices. Apple instead of pear may be used. The fruit should be dipped in lemon juice to retard discoloration.

There are many other kinds of clever table decorations. Your own imagination and inventiveness will undoubtedly help you to create some. Remember that a simple but clever idea is worth hours of laborious fussiness.

Recipes for sandwiches and other tea party refreshments

THE HOW OF SANDWICH-MAKING

Bread

Any kind of bread will make good sandwiches. Day-old bread or chilled bread will cut best. Bread that is already sliced is not too thick for large sandwiches, but, if used for small or tea sandwiches, each of the slices should be cut into two thin slices. Rolled tea sandwiches should be made from fresh bread so that they are easy to roll and will not crack. When cutting bread, keep slices together in pairs so that they will fit together.

Butter, fortified margarine, or butter spread

Have butter, margarine or spread at room temperature so that it will spread without tearing the bread. Cream if necessary. Spread very thin.

Sandwich fillings

Cheese fillings

Cottage cheese and tart jelly on cracked-wheat bread.

Creamed cheese, mixed with chopped pineapple, olives, jelly, or maraschino cherries, on enriched white bread.

Creamed cheese, moistened with cream or salad dressing, on Boston brown, apricot, banana, nut, or date bread.

Ground American cheese and peanuts, moistened with salad dressing, on enriched white bread.

Sliced Cheddar or Swiss cheese, water cress, and mayonnaise on rye bread.
Ground cheese, spinach, and mayonnaise on enriched white or cracked-wheat bread.

Egg fillings

Chopped hard-cooked egg, chopped pickle, celery, and mayonnaise on cracked-wheat bread.

Chopped hard-cooked egg, chopped olives, and mayonnaise on rye bread.
Chopped hard-cooked egg, chopped crisp bacon, a few drops of Worcestershire sauce, and salad dressing on graham bread.

Fruit fillings

Chopped prune, mixed with crisp bacon and mayonnaise, on enriched white bread.

Chopped puffed raisins (soak for 15 minutes in hot water and drain) and creamed cheese, moistened with milk, on cracked-wheat bread.

Chopped puffed raisins (soak for 15 minutes in hot water and drain) and chopped nuts, moistened with salad dressing and a little orange juice, on apricot bread.

Meat fillings

Chopped chicken livers with chopped crisp bacon, moistened with milk, on cracked-wheat bread.

Chopped chicken, chopped celery, mayonnaise, and lettuce on cracked-wheat bread.

Cooked ham, ground with roasted peanuts and mayonnaise, on rye bread.

Dried beef, cut in small pieces and mixed with ground American cheese, horse-radish, and salad dressing, on rye bread.

Ham salad: ground cooked ham with chopped celery, chopped hard-cooked egg, chopped olives, and mayonnaise on enriched white bread.

Sliced cold meat loaf, roast lamb, veal, or beef with lettuce or water cress on enriched white bread.

Sliced tongue and mayonnaise, mixed with horse-radish, on whole-wheat bread.

Peanut butter fillings

Peanut butter mixed with chopped crisp bacon and mayonnaise, on enriched white bread.

Peanut butter, mixed with pickle relish and mayonnaise, on graham bread.

Plain sandwiches

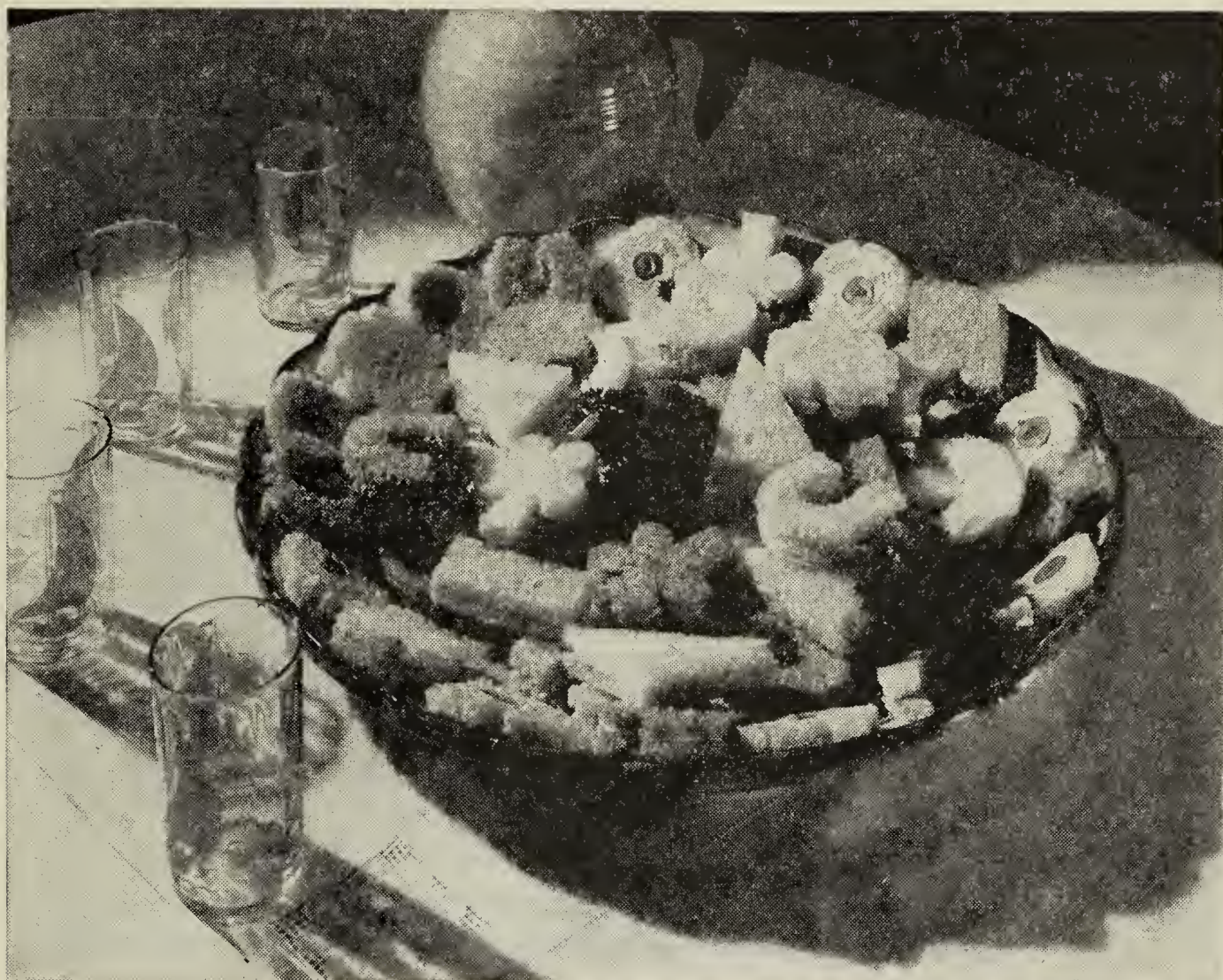
Spread one slice with soft butter or fortified margarine. Spread the other slice with sandwich filling. Place greens, if used, on top of filling. Top with buttered side of bread. Cut diagonally in halves or quarters. Arrange on plate or wrap in waxed paper. Crusts are not removed on large sandwiches.

Toasted sandwiches

Toast two slices of day-old bread in the toaster or in the oven, matching for shape. Spread one slice of toasted bread with soft butter or fortified margarine and the other slice with filling. Place filling and buttered sides to-

gether. Cut diagonally in halves or quarters. Arrange on plate. Toasted sandwiches are eaten hot.

Closed tea sandwiches



Kraft Foods Company

Remove crusts from day-old bread. Cut bread $\frac{1}{8}$ inch thick lengthwise across the loaf. With cookie cutters of various shapes and sizes cut as many pieces as possible from one slice. Cut one shape at a time. Squares, rectangles, and oblongs add to variety. Save scraps and crusts for crumbs. Spread one shape with butter and one with filling. Top the filled side with the buttered side. Place in waxed paper or in a clean tea towel wet with cold water and wrung dry, and place in an air-tight container or in the refrigerator.

Open-faced sandwiches

Prepare day-old bread as for closed tea sandwiches and cut in a variety of shapes. Spread with butter or fortified margarine and then with a sandwich filling which emphasizes color. Garnish or decorate with finely chopped parsley, parsley leaves, stuffed olives sliced, paprika, small pieces of pimento, or egg yolk put through a sieve. Place on a tray, cover with waxed paper, and chill in the refrigerator.

Rolled sandwiches

Remove crusts from fresh bread and slice $\frac{1}{8}$ inch thick across the loaf. Spread one slice of bread with butter and then sandwich filling. Roll from one end of slice to the other with the grain of the bread. Wrap in waxed paper and chill in the refrigerator.

Pinwheel sandwiches

Remove crusts from fresh bread and slice $\frac{1}{8}$ inch thick lengthwise across the loaf. Spread lengthwise with butter and then sandwich filling. Roll lengthwise, wrap in waxed paper, and chill in the refrigerator. Slice $\frac{1}{4}$ inch in thickness.

Plate or tray of tea sandwiches

Arrange sandwiches on a large plate or tray with a paper doily and garnish with pieces of parsley or water cress for color. See page 503.

WHIPPED SPREAD FOR SANDWICHES

1 lb. butter	1 T. unflavored gelatine
2 c. milk	$\frac{1}{2}$ t. salt
$\frac{1}{2}$ t. sugar	

SOFTEN 1 T. gelatine in $\frac{1}{2}$ c. cold milk.

CREAM butter well.

HEAT $1\frac{1}{2}$ c. milk to lukewarm; add gelatine and stir until dissolved.

ADD $\frac{1}{2}$ t. salt and $\frac{1}{2}$ t. sugar to butter and gradually add milk, beating as it is added.

NOTE: This doubles the original amount and is economical as well as easy to use in making many sandwiches.

TASTY TEA SNACKS

Courtesy The New York Times

1 c. condensed milk	slices of day-old bread, cut $\frac{1}{3}$ inch
$\frac{1}{4}$ c. crushed corn flakes or bran	thick
$\frac{1}{2}$ c. chopped nuts	

TURN oven to 325° F.

CUT $\frac{1}{3}$ -inch-thick bread slices with various-shaped cooky cutters. Cut as many shapes as possible inside the crusts. Save crusts and scraps for crumbs.

MIX $\frac{1}{2}$ c. nuts and $\frac{1}{4}$ c. cereal together.

DIP bread shapes in milk and then in nut mixture and place on a buttered baking sheet.

TOAST in a slow oven (325° F.) for approximately 8 minutes, or until a golden brown. Place on an attractive plate and serve with hot tea.

COCONUT DAINTIES

2 c. sifted cake flour	1 egg, well beaten
4 t. baking powder	$\frac{1}{4}$ c. milk
$\frac{1}{4}$ t. salt	$\frac{1}{2}$ c. orange juice
1 c. sugar	1 T. grated orange rind
$\frac{1}{4}$ c. shortening	

Topping

1 egg white, stiffly beaten	$\frac{1}{2}$ c. moist coconut
4 T. sugar	

GRATE 1 T. rind and extract $\frac{1}{2}$ c. orange juice.

SIFT flour and measure 2 c.; add 4 t. baking powder and $\frac{1}{4}$ t. salt, and sift.

CREAM $\frac{1}{4}$ c. shortening and 1 c. sugar.

GREASE lightly a shallow baking pan 10 x 15 x 1. Turn oven to 350° F.

BEAT egg white until stiff and add 4 T. sugar for topping.

BEAT egg well; add with orange rind to shortening and sugar mixture.

ADD flour and orange juice alternately to first mixture and pour into greased pan.

SPREAD egg white on top of batter and sprinkle coconut on top of the egg white. Bake in a moderate oven (350° F.) for 25 minutes.

COOL, cut into strips three inches long and one inch wide.

NOTE: Coconut dainties make an attractive addition to the tea table and are very good served with ice cream or other desserts.

CREAM PUFFS

MAKES 6 LARGE PUFFS

$\frac{1}{4}$ c. butter or fortified margarine	2 eggs
$\frac{1}{2}$ c. boiling water	F. G. salt
$\frac{1}{2}$ c. sifted all-purpose flour	

GREASE lightly a baking sheet.

SIFT flour and measure $\frac{1}{2}$ c.; add F. G. salt, and sift.

PLACE $\frac{1}{4}$ c. butter or margarine in a small saucepan and pour on $\frac{1}{2}$ c. boiling water; cook over a low heat; stir until the butter melts.

ADD flour all at once, and with a wooden spoon stir constantly until the mixture leaves the sides of the pan and forms a ball. Remove from heat and cool.

TURN oven to 375° F.

ADD unbeaten eggs one at a time, beating mixture to a smooth paste after each egg is added. Continue to beat for 1 minute.

DROP by tablespoonfuls on baking sheet three inches apart.

- BAKE** in a moderate oven (375° F.) for 15 minutes, or until well puffed and delicately brown. Reduce heat to 300° F. and bake for 35 minutes longer. Cool on cake rack.
- CUT** off the tops with a sharp knife and fill the puffs with a cream filling (page 522) or ice cream (page 191).
- NOTE:** The size of the puff is determined by the amount of batter used for each one. Very small puffs are made by placing teaspoonfuls of batter on the baking sheet. These may be filled with a cream or custard filling and iced and used for a tea or an appetizer tray.

CLASS ACTIVITIES

1. Discuss the form of invitations to informal luncheons and supper parties. Decide how you would invite a small group of friends to a badminton party followed by supper at your house. Be prepared to tell how you would express yourself verbally or in writing.
2. Plan menus for a small informal tea on a hot day; for a large, formal tea in January; for a buffet Sunday night supper in June; for a guest luncheon when the hostess has no help.
3. Make a "map" of a buffet table showing where each service dish, plates, silver, napkins, and centerpiece are placed. Use arrows to show the route of the guests as they help themselves at the table.
4. Describe the cleverest and most enjoyable party you ever attended, including the entertainment and the refreshments. Why was it a good party?

FUN WITH FOOD AT HOME

1. Have an informal party with a "plate supper" which you plan and prepare yourself.
2. Assist your mother or other person at a formal tea, buffet supper, or guest luncheon. Report your duties and explain what you learned on the job.

2. Family dinner parties: with or without company

A dinner party may be a purely family affair, and a very jolly one. When friends are invited to join the family circle on such an occasion, they welcome the opportunity to enjoy both food and fun. Christmas, Thanksgiving, anniversaries, and Sundays are the traditional occasions for the gathering of family groups and friends. Good food, games, music, dancing, and other recreational activities are combined to make the family dinner party a gay and festive celebration. Very few families care to serve these dinners in formal style, and in this problem we are concerned only with informal service.

Christmas dinner traditions. Roast turkey, chicken, or goose with stuffing, cranberry sauce, fruit cake, mince pie, plum pudding, home-made candies, and fancy cookies are sure to find a place on the menu for Christmas dinner. For decorations, we depend on evergreens, red candies, holly, poinsettias, and miniature ceramic figures of angels, Santa Claus, reindeer, and snow men.

The Christmas dinner table can be beautiful indeed. Both food and decorations lend themselves very satisfactorily to a delightful use of the traditional Christmas colors, red and green. Can you imagine the lovely effect of a Christmas dinner table with the foods and decorations given below?

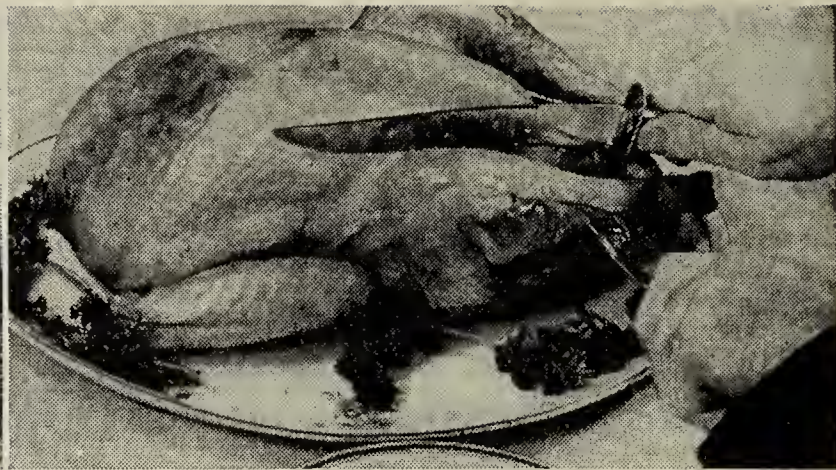
Christmas dinner menu		Table decorations
Tomato Juice Cocktails		Pale green tablecloth and napkins.
Roast Chicken Garnished with Parsley		White Wedgwood china.
Dressing	Giblet Gravy	Centerpiece of red candles, arborvitae branches, berries, and tree ornaments. See left illustration, page 510.
Mashed Potatoes	Brussel Sprouts	Place cards made of red paper and trimmed with gold stars, with names written in white.
Small Spiced Beets		
Hot Rolls	Strawberry Jelly	
Cherry Gelatin Salad on Leaf Lettuce		
Fruit Cake with Hard Sauce		
Coffee	Milk	

The bird is a headline feature. The chicken, turkey, or other bird is the most important item on the Christmas dinner menu and, quite naturally, receives special attention from the cook who prepares it, the host who carves it, and from all who eat it. Directions for preparing the Christmas bird are given on page 508. Step-by-step instructions for carving a chicken are given in the series of illustrations on the next page. Other birds are carved by a similar procedure except that, in the case of the turkey, the meat on the wings and legs is sliced from them because they are too large to serve whole. You will note that the carver needs an extra plate for cutting up the portions with ease. He also needs a sharp carving knife and long-handled two-pronged fork in order to do the job efficiently. Skillful carving at the Christmas dinner table is a high light of the occasion.

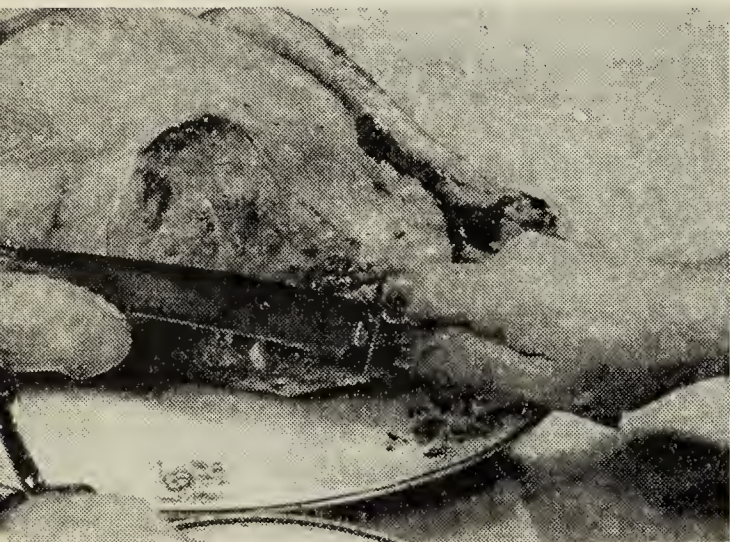
Variety in Christmas table decorations. There are endless possibilities in decorations for Christmas dinner tables. The natural greens—pine, cedar, balsam, arborvitae, laurel, holly, and others—can be used most effectively. Pine cones, winter berries, tree ornaments, artificial holly, and tiny trees are among the other materials which can be employed to create pretty tables. The centerpieces portrayed in the illustra-



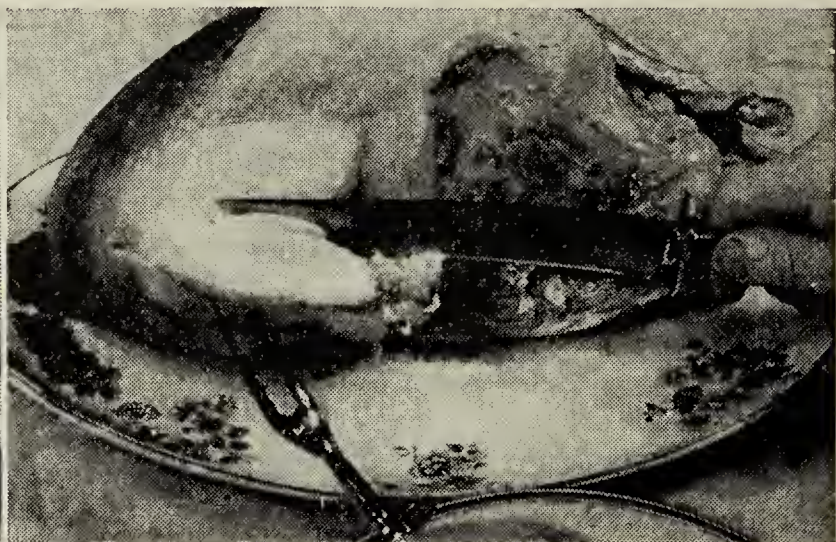
1. Place the bird in front of the carver with the breast to the left.



2. Place the knife between the thigh and body and cut through the skin to the joint. Separate the leg from the body by pressing the leg outward with the knife and bending the leg back with the fork. Then separate the thigh and drumstick.



3. Disjoint the wing and separate from the body same as the leg.



4. Slice downward across the breast beginning half way down the breast.



HOST'S-EYE VIEW OF CARVING A CHICKEN

A sharp knife is essential for successful carving.

5. Finish slicing breast beginning each cut higher till even with wishbone.

Swift & Company



National Cranberry Association

Cranberry pies, filled cookies, or tarts make gay and festive desserts for the Christmas table.

The feature at a holiday tea party may be a white frosted cake with maraschino cherries.

Swansdown Cake Flour





Sunset Magazine

Christmas greens, tall candles, glistening ornaments, and winter berries make beautiful decorations for a holiday table.

tions on page 494 show simple but delightful decorations. The left arrangement is suitable for a small table and is very easy to do. The shiny balls are tree ornaments and reflect the candlelight charmingly. The candleholders were made by cutting star shapes from blocks of wood and painting them red. The boys of the family can make such holders, varying the shapes as desired. The centerpiece at the right is very simply arranged, with Christmas cookies used as part of the decorations. The setting on page 519 features a praline Christmas cake as the center of interest. The tiny snow-laden trees and amusing little ceramic figures combine to make a fascinating effect.

A very clever Christmas table decoration, the sugarplum tree, is shown in full color on the opposite page. This is a centerpiece which will need redecorating every day because its trimmings are good to eat! There must be plenty of extras on hand to keep this Christmas tree at its best. The tree shown in the color photograph is two feet high. It's an artificial tree made of shiny white rayon floss. A small evergreen, either cut or growing in a pot, is also an attractive background for edible decorations. A cut evergreen thrust into a pot of wet sand or pebbles and water will keep fresh for days. Set the tree on a glass-topped table, a tray or cookie sheet covered with shiny new red, black, or green oilcloth or with shelf paper or plastic material. Pile fresh fruit and nuts around the base of the tree. The fruit should be washed and ready to eat, the grapes cut into convenient-size bunches, the small Lady apples polished until they gleam.

Cookies and kumquats are attached to the tree with short pieces of wire, or the little thin wire hangers used for Christmas-tree ornaments.





American Molasses Company

A plate of goodies which features taffy apples.

Pierce the cookies while they are still warm. Use a variety of cutters; you may not be able to buy many new ones, but you can trace or draw freehand on cardboard and make cardboard patterns. You don't have to be an artist to decorate cookies. Cinnamon candies, candy shot, and colored-sugar decorations are put on before baking; confectioners'-sugar icing decorations are added after baking. The cookies themselves are sugarless crisp ginger cookies, and a very little sugar will make icing to decorate dozens of them. You can use a pastry tube or stiff paper cone to outline a gingerbread man or a Santa Claus cooky.

Candies, nuts, and popcorn balls are wrapped in colored tissue, transparent paper, or gold and silver foil. Use wax paper as an inner wrapping if the fancy papers incline to stick. Tie the wrapped confections to the tree with colored crochet yarn, decorative paper ribbon, and bits of tinsel. Popcorn strings are gay on an evergreen tree. On a white tree use swags of raw cranberries.

Christmas cookies and candies. All kinds of Christmas goodies are needed for holiday festivities. Cookies cut in fancy shapes—stars, trees, deers, etc.—and decorated with tinted frosting are gay and decorative. Easy-to-make candies are special after-dinner treats. The plate of confections shown in the picture on this page supplies a delightful finish to a holiday meal or serves as party refreshments with plenty of eye-

CLASS PROJECT: A DINNER PARTY CELEBRATING CHRISTMAS, THANKSGIVING, A BIRTHDAY, OR OTHER SPECIAL OCCASIONS.

1. Plan a family dinner party, including menu and table decorations. Select members of the class to play the part of the "family." If possible, two or three dinner tables should be planned for so that each member of the class may participate in the dinner party.
 2. Make a work schedule, including a market list, marketing for the food, preparation of the food, setting the table, arranging the decorations, serving, and clearing up afterward. Your time schedule will depend upon the length of your class periods.
 3. The preparation of the turkey or other bird will be a demonstration lesson.
 4. Discuss the success of your dinner party and suggest ways in which it might have been improved.
-

appeal. The taffy apples, peanut butter brittle, fudge, panocha, and caramelized corn offer a variety of sweets to please any taste.

Thanksgiving dinner parties. The first Thanksgiving dinner was an expression of gratitude for a bountiful harvest and freedom from want for the coming winter. Since those early times, Thanksgiving Day has become a national holiday for the purpose of saying "thank you" to the Power that has blessed our country with plenty. The menu for the Thanksgiving dinner is similar in many respects to that for Christmas dinner, but it has its own special kinds of foods and decorations. A chicken, a turkey, or some other bird constitutes the main dish, and cranberry sauce is the traditional accompaniment.

Since Thanksgiving is really a harvest festival, it is appropriate that homegrown fruits and vegetables should play an important role in the feast. Golden pumpkins from the fields are transformed into delicious pumpkin pies, and are sometimes used as part of a harvest centerpiece. Potatoes, turnips, squash, carrots, nuts, and apples are among the other good things that deck the festive board.

Colors for Thanksgiving table decorations are suggested by the colors of the harvest fruits and vegetables—yellow, orange, russet, and brown. Stuffed celery, pickles, and olives make a pleasant beginning for a Thanksgiving meal, and a dessert of cheese and fruits shown in the illustration on page 198 makes an excellent finish. This type of dessert is a very good ending for a heavy meal. A dessert that is too heavy and rich can ruin a very good dinner! Wise hostesses often avoid this mistake by serving cheese and fruit.



Will and Baumer Candle Company, Syracuse, N. Y.

A family party can be festive and exciting!

Birthday and other family parties. Family birthdays, wedding anniversaries, and other special dates are frequently celebrated with family dinner parties. In many families there are special customs attached to each occasion. For example, in one family birthdays are celebrated with special dinner menus always selected by the person who is having the birthday. In another family the birthday dinners always include a cake with candles, but the cake is not served until the person has hunted for his gifts hidden by the other members of the family. In another family the member who has the birthday is allowed to invite a guest to the family dinner party.

Wedding anniversaries, farewells, welcomes home, and family reunions are frequently observed by dinner parties. When the number is large, a buffet meal is generally served. At all these parties, the spirit and thought of the occasion is more important than a costly variety of food. A clever idea for a centerpiece and for place cards, plus good food nicely served, furnishes more pleasure and fun than expensive flowers poorly arranged and high-cost foods unattractively served. For example, a birthday dinner with the most inexpensive menu and no "bought"

decorations can be very jolly with a little special planning. The gifts, which are small, might be placed in a big bowl and covered with fruit that is served as part of the dessert. Finally, the gifts are discovered, but they cannot be opened by the recipient until he has guessed the contents. His questions about each gift may be answered only by "yes" or "no."

Make a time-plan for party preparations. Every party should be managed so that there is as little last-minute preparation as possible. Everything possible should be done ahead of time. Christmas dinner party preparations should begin at least a week before Christmas Day, and plans for the menu and decorations should be done long before that. A good time-plan might read as follows:

Monday: Check the table linens; wash, iron, mend, and remove spots if necessary.

Tuesday: Clean silver.

Wednesday: Make place cards, centerpiece (unless perishable type is used), and other decorations.

Thursday: Make candies, cookies, or other special sweets.

Friday: Marketing.

Saturday: Prepare turkey or other bird for roasting, make gelatine salads, desserts, or other dishes which can be made 24 hours ahead.

Sunday (Christmas Day): Make all other dinner preparations, which should be scheduled by the hour and minute.

The homemaker-manager-cook who does this kind of preliminary planning relieves herself of much of the last strain and hurry of a dinner party.

Recipes for dinner party dishes

ROAST CHICKEN

4 to 5 lbs. roasting chicken
1 clove of garlic

1 t. salt
2 T. bacon drippings

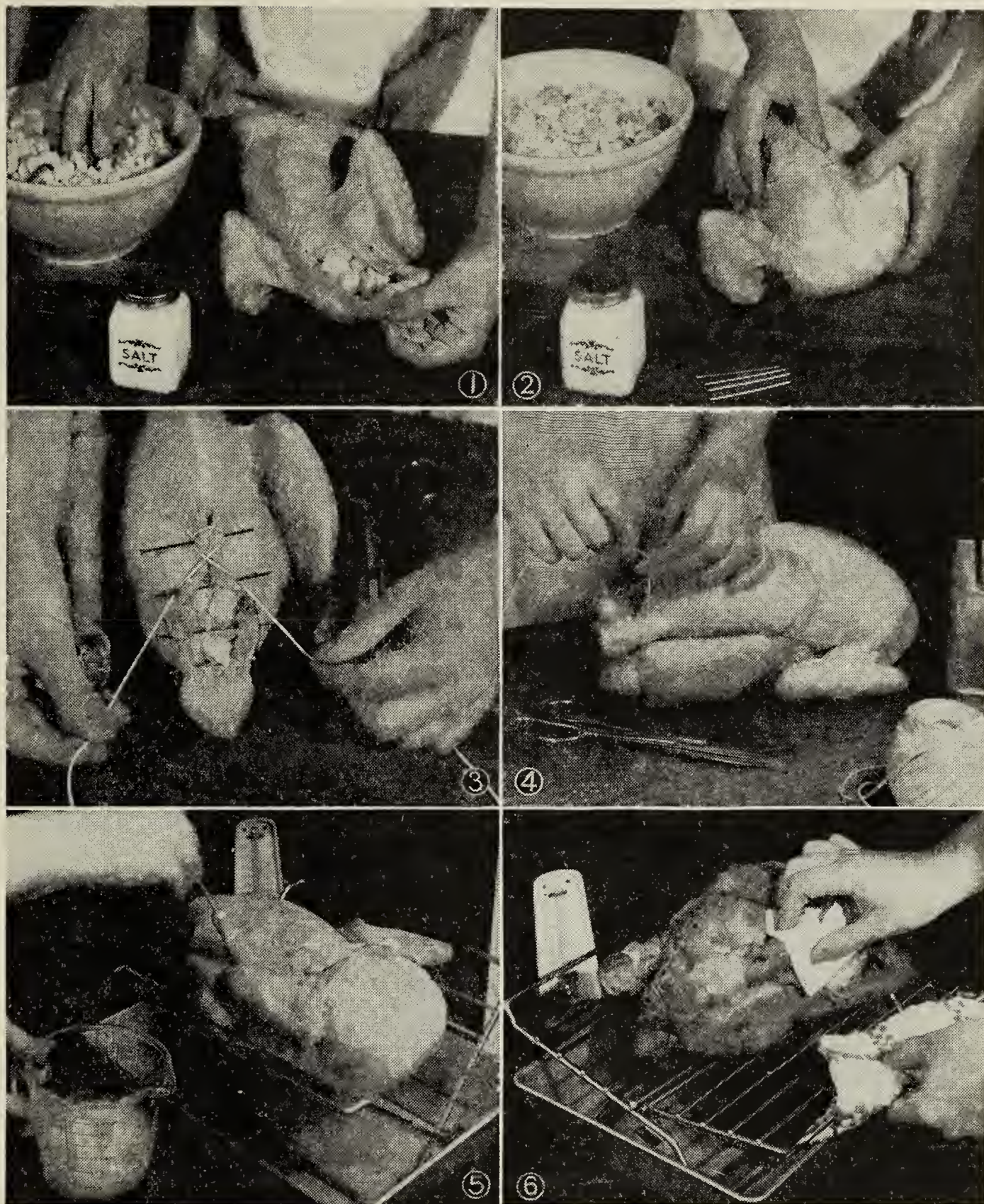
SINGE chicken over a low flame; remove any pin feathers and oil sac; wash well inside and out, and dry.

RUB inside and out with clove of garlic, sprinkle inside with salt.

MAKE dressing according to directions on page 516.

TURN oven to 325° F.

STUFF the neck cavity to plump up the breast; bring the skin of the neck to the back and fasten with a small skewer. Turn wings back.



Poultry and Egg National Board

These pictures illustrate six of the steps in stuffing and roasting a chicken.

1. Stuffing the neck cavity to plump up the breast.
2. Closing the neck opening with a small skewer.
3. Stuff the body cavity and close the opening by use of small skewers laced with clean white cord.
4. Tie the legs together.
5. Place breast down on a trivet or rack in a shallow roasting pan; brush with melted bacon drippings.
6. Turn chicken breast side up when about three-fourths done.

- PLACE** the chicken on its back and stuff the body cavity, being careful not to pack the stuffing. Close the opening by use of small skewers laced with clean white cord.
- TIE** the legs together; place breast down on a trivet or rack in a shallow roasting pan; brush with 2 T. melted bacon drippings.
- BAKE** in a slow oven (325° F.) for 35 to 40 minutes per pound; turn chicken breast side up, when about three-fourths done; cover with roaster lid ¼ hour before serving.
- NOTE:** Roast chicken may be served with spoon bread (pages 133 and 134), buttered green beans or peas (page 278), celery and carrot strips (page 280), and cranberry parfait (page 194).

DRESSING OR STUFFING FOR CHICKEN

- | | |
|---|-----------------------------|
| 4½ c. white, day-old bread crumbs | ⅛ t. pepper |
| 3 T. melted butter or fortified margarine | 1 T. finely chopped parsley |
| | 1 t. poultry seasoning |
| ½ t. finely chopped onion | ½ t. salt |

- CRUMB** 4½ c. bread in medium-sized pieces or cut in small cubes. Add ½ t. onion, 1 T. parsley, 1 t. poultry seasoning, ½ t. salt, and ⅛ t. pepper.
- MELT** 3 T. butter or fortified margarine in a skillet; add bread crumbs; turn until well coated and all butter or fortified margarine is absorbed.

GRAVY

(Ahead of time)

- | | |
|---|---------------------|
| 1½ c. stock, made from cooking giblets and neck | ½ t. salt |
| 3 T. chicken fat | ⅛ t. pepper |
| 3 T. flour | ¾ t. gravy coloring |

- COOK** giblets and neck in 2 c. water at simmering temperature until tender, to make stock. Cook liver for 15 minutes and remove from water.
- MIX** 3 T. flour, ½ t. salt, and ⅛ t. pepper with ½ c. cool stock; add to 1 c. stock with ¾ t. gravy coloring.
- COOK** over direct flame until thick, stirring constantly. Let stand over hot water until chicken is roasted, then add 3 T. chicken fat and brown drippings in bottom of roaster to gravy; heat.

GRAVY

(Last minute)

- | | |
|---|-------------|
| 1½ c. stock, made from cooking giblets and neck | ¼ t. salt |
| | ⅛ t. pepper |

3 T. chicken fat

$\frac{3}{4}$ t. gravy coloring

3 T. flour

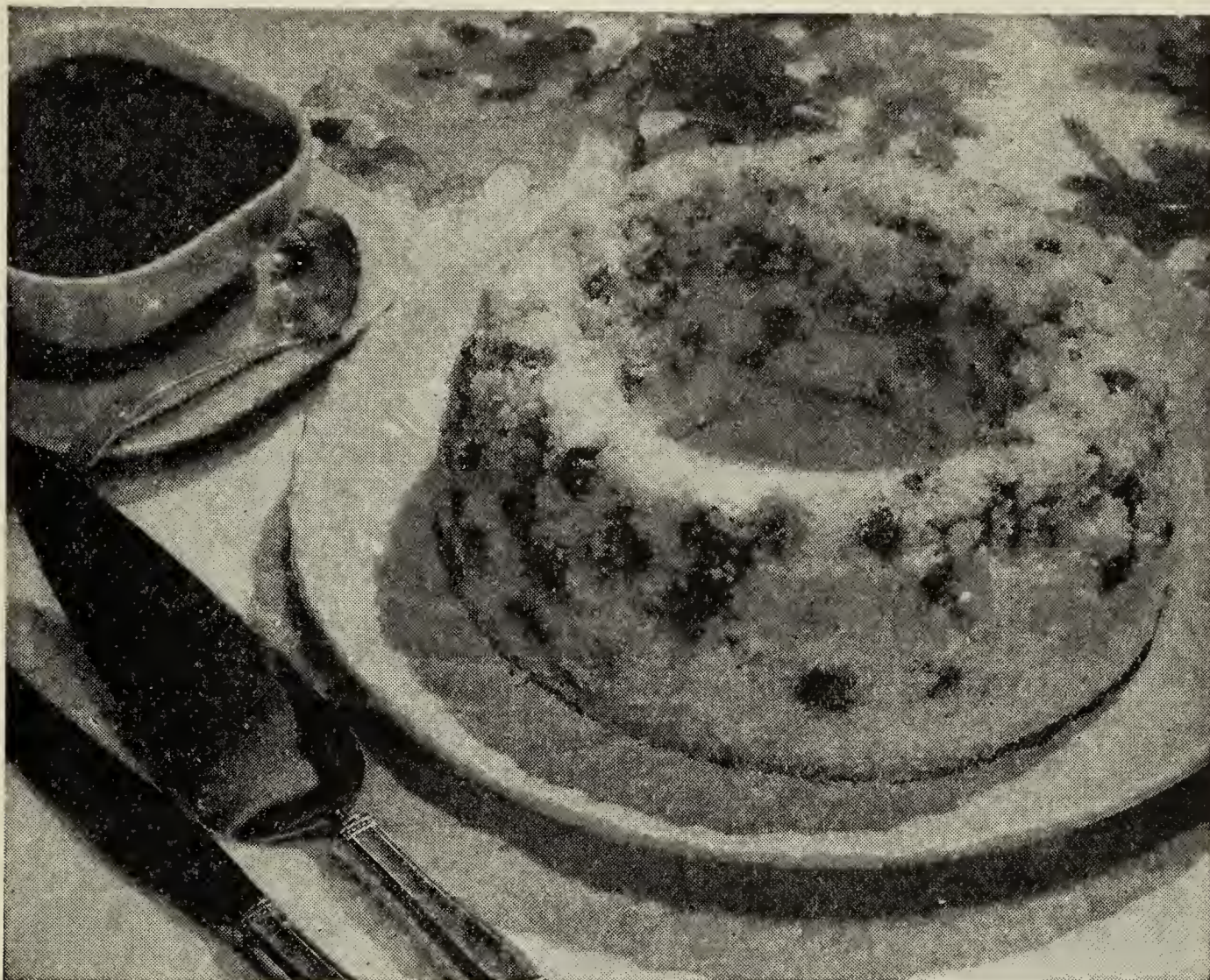
MIX $\frac{1}{2}$ c. stock with 3 T. flour and add remaining 1 c. stock.

POUR off fat from roaster with the exception of 3 T.

ADD $\frac{1}{4}$ t. salt, $\frac{1}{8}$ t. pepper, $\frac{3}{4}$ t. gravy coloring, and stock to chicken fat.

COOK until thick, stirring constantly. Add cut giblets.

STEAMED CRANBERRY PUDDING



The Best Foods, Inc.

$1\frac{1}{3}$ c. sifted all-purpose flour

$\frac{3}{4}$ c. sugar

$1\frac{1}{2}$ t. baking powder

$\frac{1}{2}$ c. milk

$\frac{1}{4}$ t. salt

1 egg

$\frac{1}{4}$ c. fortified margarine

1 t. vanilla

2 c. whole raw cranberries

WASH and pick over 2 c. cranberries and drain. Place steamer with water in the bottom over the fire to heat. Grease an 8-inch ring mold.

SIFT flour and measure $1\frac{1}{3}$ c.; add $1\frac{1}{2}$ t. baking powder and $\frac{1}{4}$ t. salt; sift.

CREAM $\frac{1}{4}$ c. margarine and $\frac{3}{4}$ c. sugar; add egg and beat well. Add 1 t. vanilla and $\frac{1}{2}$ c. milk. Mix. Add flour and mix until smooth.

FOLD in cranberries; turn into ring mold, and place in steamer. Cover tightly and steam for 30 to 35 minutes. Remove from steamer and gently run a spatula around each side of the mold; invert on a large plate. Serve with caramel sauce (page 191).

NOTE: Cranberry pudding is a grand dessert to serve at the table.

CRANBERRY SAUCE OR JELLY

4 c. cranberries
2 c. boiling water

2 c. sugar

WASH and pick over 4 c. cranberries; place in a saucepan. Add 2 c. boiling water; cover and boil gently 20 minutes.

SAUCE: add sugar; cook for two minutes; cool and place in a covered glass jar, and store in the refrigerator.

JELLY: rub berries through a coarse sieve. Return to pan and cook 3 minutes. Stir in 2 c. sugar and then cook for 2 minutes. Pour into mold and chill.

LOOSEN the jelly by pressing edges with the finger, invert on the plate, and decorate with half slices of orange.

CRANBERRY RELISH

4 c. cranberries
2 oranges

4 apples
2 c. sugar

WASH and pick over 4 c. cranberries. Wash, quarter, and core 4 apples. Wash 2 oranges, quarter, and remove seeds.

PUT all fruit through the food chopper, using a coarse knife. Add 2 c. sugar and mix well. Store in tightly covered glass jar in the refrigerator.

DATE AND NUT TORTE

SERVES 8

1 c. sifted all-purpose flour
1 c. sugar
1 T. butter or fortified margarine
2 eggs, well beaten
1 c. walnuts, cut in small pieces
1 c. dates, cut in small pieces

1 t. soda
1 c. boiling water
 $\frac{1}{8}$ t. cinnamon
 $\frac{1}{8}$ t. nutmeg
 $\frac{1}{4}$ t. salt
 $\frac{3}{4}$ c. heavy cream whipped

STONE 1 c. dates; stem and cut in small pieces; add 1 t. soda and cover with 1 c. boiling water; allow to stand for 1 hour.

SIFT flour and measure 1 c.; add $\frac{1}{8}$ t. cinnamon, $\frac{1}{8}$ t. nutmeg, and $\frac{1}{4}$ t. salt; sift. Add 1 c. chopped nuts.

CREAM 1 T. butter or margarine and gradually add 1 c. sugar.
 TURN oven to 325° F. and grease lightly 8 x 8 x 2 inch pan.
 BEAT 2 eggs well and add to sugar mixture; add dates and, lastly, the flour and nuts. Mix well. Pour into pan and bake in a slow oven (325° F.) for 40 minutes.
 CUT into squares and top with whipped cream.
 NOTE: Date and Nut Torte made a day before using improves in flavor. When cool, wrap pan and torte in waxed paper and place in the bread box.

PRALINE CHRISTMAS CAKE



Swans Down Cake Flour

2 c. sifted cake flour	½ c. shortening, room temperature
2½ t. baking powder	1 c. milk
1 t. salt	2 eggs, unbeaten
1½ c. sugar	1 t. vanilla

Topping

½ c. brown sugar, firmly packed	2 T. sifted cake flour
3 T. melted butter or fortified margarine	2 T. water
	½ c. chopped nut meats

SIFT flour and measure 2 c. Add 2½ t. baking powder, 1 t. salt, and 1½ c. sugar. Sift.

TURN oven to 375° F.

CREAM ½ c. shortening by hand or electric beater, low speed. Sift in flour. Add ¾ c. milk and moisten flour and beat well. Add 2 eggs, 1 t. vanilla, and remaining ¼ c. milk; beat until fluffy.

TURN into a greased pan 13 x 9 x 2 inches, bake in a moderate oven (375° F.) for 35 minutes, and remove from oven.

COMBINE ½ c. brown sugar, 2 T. flour, 3 T. melted butter or margarine, 2 T. water, and ½ c. chopped nut meats. Spread carefully over hot cake. Return to oven and bake for 5 minutes.

HOT MILK SPONGE CAKE

1 c. sifted cake flour
2 t. baking powder
F. G. salt
1 c. sugar
2 t. lemon juice
6 T. hot milk
3 eggs, well beaten
1½ T. confectioners' sugar for top

SIFT flour and measure 1 c.; add 2 t. baking powder and F. G. salt; sift.

TURN oven to 350° F.

BEAT 3 eggs until thick and lemon-colored; gradually add 1 c. sugar, beating after each addition; add 2 t. lemon juice and beat.

FOLD in flour, a small amount at a time; add 6 T. hot milk and beat quickly until batter is smooth; pour into tube cake pan and bake in a moderate oven (350° F.) for 35 minutes or in two 8 x 8 x 2 inch cake pans for 25 minutes.

INVERT cake pan on rack and leave until cool. Remove from pan and sift 1½ T. confectioners' sugar on top.

ANGEL FOOD CAKE

1 c. sifted cake flour
1½ c. sifted sugar
¼ t. salt
1¼ t. cream of tartar
1¼ c. egg whites, stiffly beaten
1 t. vanilla
¼ t. almond extract

SIFT flour and measure 1 c.; add ½ c. sugar; sift 4 times.

SEPARATE eggs and measure 1¼ c. Place whites in a large bowl and yolks in a glass jar; cover jar tightly and place in the refrigerator.

TURN oven to 300° F.

BEAT whites and ¼ t. salt with a rotary beater or wire whisk until foamy. Add 1¼ t. cream of tartar and continue to beat until whites hold a peak, but not until dry.

GRADUALLY add 1 c. sifted sugar, sprinkling 2 T. at a time and beating after each addition until all the sugar is used. Fold in 1 t. vanilla and ¼ t. almond extract.

- SIFT $\frac{1}{4}$ c. flour at a time on egg whites and fold in lightly; repeat until all is used. Turn mixture into 10-inch tube cake pan, rinsed in cold water.
- CUT through mixture with a knife to remove any air bubbles.
- BAKE in a very slow oven (300° F.) for 45 to 50 minutes.
- REMOVE from oven and invert on a rack to cool. Loosen from the sides and tube of pan with a spatula and turn on a large plate.
- FROST with confectioners' icing (page 241), or Bavarian cream (page 189).

JELLY ROLL



Swans Down Cake Flour

$\frac{3}{4}$ c. sifted cake flour
 $1\frac{1}{2}$ t. baking powder
 $\frac{1}{4}$ t. salt
 1 c. tart jelly

$\frac{3}{4}$ c. sugar
 1 t. vanilla
 4 eggs, well beaten

- SIFT flour and measure $\frac{3}{4}$ c.
- LINE shallow pan, 15 x 10 x 1 inches, with waxed paper.
- TURN oven to 400° F.
- BEAT 4 eggs, $1\frac{1}{2}$ t. baking powder, and $\frac{1}{4}$ t. salt in a bowl placed over another bowl containing hot water. Gradually add $\frac{3}{4}$ c. sugar and beat until thick and lemon-colored. Remove bowl from water.

- FOLD in flour and 1 t. vanilla; pour into pan and evenly distribute batter.
- BAKE in a moderately hot oven (400° F.) for 13 minutes.
- REMOVE from oven; trim off crusts, quickly using a sawing motion that does not tear the cake.
- INVERT pan on a clean cloth dusted with confectioners' sugar; coax the cake out with a spatula and remove waxed paper at once.
- SPREAD almost to the edges with tart jelly while warm, and turn up edge of cake about 1 inch, by lifting up cloth, to start cake to roll. Continue by lifting cloth to guide the rolling and keep cake straight. When completely rolled, wrap cake in cloth to cool.

BOSTON CREAM PIE

- | | |
|------------------------------------|------------------------------|
| $\frac{3}{4}$ c. sifted cake flour | 1 t. vinegar |
| $\frac{3}{4}$ t. baking powder | $\frac{3}{4}$ t. vanilla |
| F. G. salt | 3 egg yolks, well beaten |
| $\frac{1}{2}$ c. sugar | 3 egg whites, stiffly beaten |
- LINE the bottom of two 8-inch pie pans with waxed paper.
- SIFT flour and measure $\frac{3}{4}$ c.; add $\frac{3}{4}$ t. baking powder and F. G. salt; sift.
- BEAT 3 egg yolks until thick and lemon-colored; add 1 t. vinegar and $\frac{3}{4}$ t. vanilla; beat well.
- TURN oven to 350° F.
- BEAT 3 egg whites until stiff; add $\frac{1}{2}$ c. sugar gradually, and beat after each addition.
- FOLD flour into the egg mixture; then fold in egg whites and pour evenly into two pie pans and bake in a moderate oven (350°) for 25 to 30 minutes.
- TURN onto cooling rack; remove waxed paper and cool.
- MAKE recipe of cream filling (below) and put between layers, bottom sides to the middle. Sprinkle top lightly with confectioners' sugar.
- NOTE: Washington Pie is made the same way, but, instead of having sugar over the top, use a topping of cocoa or chocolate frosting (page 242).

CREAM FILLING FOR BOSTON CREAM PIE

- | | |
|---|---|
| $1\frac{1}{2}$ c. scalded milk | $\frac{1}{2}$ t. salt |
| 1 egg, beaten | $1\frac{1}{2}$ T. butter or fortified margarine |
| $\frac{1}{2}$ c. sugar | 1 t. vanilla or lemon extract |
| $\frac{1}{4}$ c. sifted all-purpose flour | |
- SCALD $1\frac{1}{2}$ c. milk.
- MIX $\frac{1}{2}$ c. sugar, $\frac{1}{4}$ c. flour, $\frac{1}{2}$ t. salt, and $1\frac{1}{2}$ T. butter or margarine in the top of a double boiler. Slowly add scalded milk.
- COOK over direct low heat until thickened, stirring constantly.
- BEAT egg and slowly add a little of the hot milk mixture. Stir, add remaining milk. Return to mixture in the top of double boiler.

COOK over boiling water for 2 minutes, stirring constantly. Remove from heat; add 1 t. vanilla or lemon extract; cool.

CLASS ACTIVITIES

1. Make a list of clever ideas for centerpieces, place cards, and menus for dinner parties. Let each member of the class contribute as many ideas as possible. You may wish to file this list of ideas with your recipes for future use.

2. To what extent do you consider yourself personally responsible for the success and fun of a family party, either with or without guests? Do you consider it right for you to leave the table early to go to the movies or for some other reason? What effort should you make to keep the occasion pleasant?

3. Plan a Thanksgiving or Christmas dinner menu in which all of the seven basic foods are included.

FUN WITH FOOD AT HOME

1. Assist your mother in the *planning* and preparation for a family dinner party. Report on the smoothness with which the work was accomplished.

2. Figure the cost of a dinner party for your family and two guests at a moderate-cost level. Your figures should include any costs for decorations.

3. *Special kinds of parties*

Party-minded folk have a great variety of party occasions from which to choose: Halloween, Valentine Day, dances, bridge parties, New Year's Eve, after the movies or bowling; or they can have outdoor parties, including picnics, beach parties, weiner roasts, and hikes. It is not possible to describe here all the parties which you might enjoy, but only to give a few suggestions.

Halloween parties. This is the occasion for masquerades, jack-o'-lanterns, witches, goblins, and black cats. Halloween colors, derived from pumpkins and black magic, are the traditional orange and black. The picture on page 524 shows appropriate decorations and refreshments for a Halloween dance. The punch bowl is ringed with amusing little jack-o'-lanterns made from oranges, whose interiors were used in the punch. Doughnuts on an orange platter furnish a fine accompaniment for the punch. Bright yellow-orange chrysanthemums and black raisins complete a very jolly table setting.



Sun Maid Raisin Growers

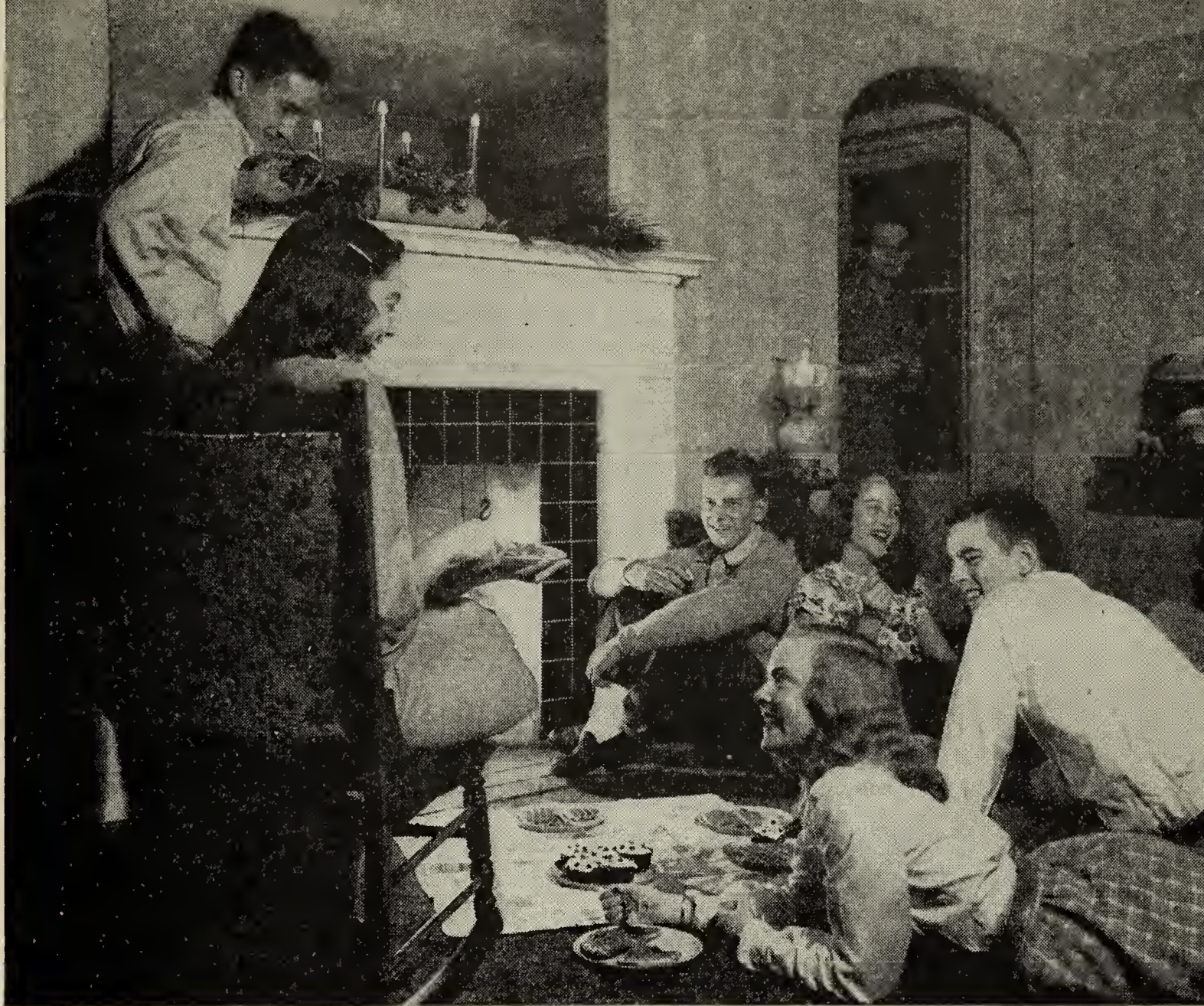
This is a clever refreshment table for a Halloween party.

An informal party anytime. There is no need to wait for a special occasion to have a party. You can invite “the gang” in for “eats” anytime: after the movies, after the game, or after bowling. Quick and easy refreshments suit the style of an impromptu party. Club sandwiches, potato chips, and milk drinks taste good after an evening at the skating rink or the bowling alleys.

On such informal occasions, the guests do their share in preparing the food as well as eating it. Perhaps the refreshments will consist of weiners or marshmallows to be roasted over an open fire. Paper plates, cups, napkins, and tablecloth make very little work for the hostess after the party is over. Some people who like to entertain frequently at informal gatherings keep paper party supplies on hand.

A very informal party with refreshments being eaten in a most informal style is shown in the top picture on page 525. This kind of service is hardly to be recommended for all occasions, but, apparently, the cakes and waffles taste very good and the party is very gay.

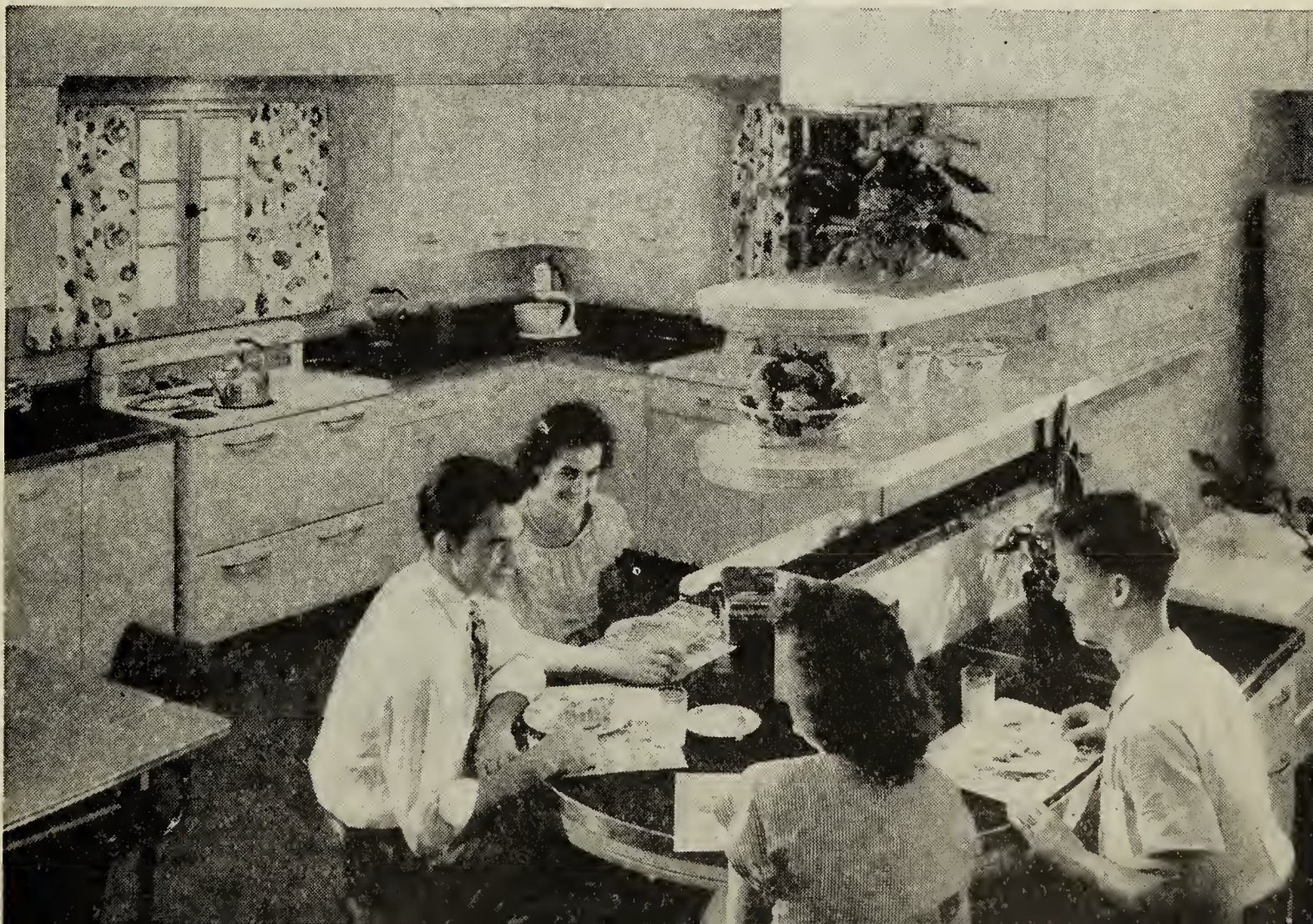
Parties anywhere. The best parties are not always held in the best parlor. Kitchens, porches, basements, attics, and back yards can be the



Ann Pillsbury, Pillsbury Mills, Inc.

Top: This impromptu party was obviously not planned, but it is fun.
Bottom: After the movies, waffles at the food bar.

Langley High School, Pittsburgh Public Schools



CLASS PROJECT: A PICNIC OR SOME OTHER SPECIAL TYPE OF PARTY.

1. Plan a class picnic, a Valentine party, a dance, or another party, and invite friends of your own age.
 2. Try to originate a clever idea for invitations, decorations, food, and entertainment.
 3. Divide the responsibilities for entertainment, decorations, food preparation, and clearing up afterward among the groups in the class.
 4. Hold a party clinic the day after the party and rate yourselves as party givers.
-

scene for very happy festivities. Most people enjoy parties more when there is "something to do." Besides participating in games and stunts, they sometimes like to have a share in preparing the food. A "kitchen" party can be excellent fun. The illustration on page 525 shows a kitchen party going on. While one waffle is about to be baked, another is being tasted.

In one neighborhood a back-yard garden party is an annual event for five families living in adjoining houses. In this case, the basements have doors opening directly into the gardens, and the food is served from the utility room in one of the houses. Some of the food is prepared on the laundry range, and the rest is brought down from the kitchen. It is all set out in buffet style on tables, which are boards laid across the tops of the laundry tubs. When everything is ready, people come in from the garden, help themselves to the food, and return to the garden for a semipicnic dinner.

Picnics are fun. Lots of fun and lots of good things to eat are always associated with the idea of a picnic. In fact, the phrase, "We had a picnic," means a gay and exciting time. Eating outdoors with friends appeals to most people as a pleasant and healthful recreation. Little folk like to have their own private picnics in their own gardens or nearby parks. The same foods taste much better when eaten under the shade of a big tree than when eaten from the usual table in the house. Wise mothers find ways to provide the right foods in picnic baskets and encourage the children to eat outdoors. Peanut butter sandwiches, carrot sticks, oranges, cookies, and a bottle of milk with a straw furnish a good share of a well-balanced diet for a day's rations.

In some families, a picnic is in order every Saturday or Sunday in fine weather. There are many spots where fireplaces and wood for cooking



U. S. D. A. Extension Service

4 H Club members cook their meal outdoors and serve it buffet style on a picnic table.

are available, and the homemaker-manager can plan an appetizing and nutritious picnic meal without difficulty. A minimum amount of cooking is advisable because most people who go to the picnic prefer to enjoy the outdoors or play games rather than cook. Many foods can be prepared at home and kept warm by thermos jugs or by careful packing. For example, cocoa and coffee can be kept hot many hours in thermos bottles. Such foods as scalloped potatoes, baked beans, and casserole dishes can be kept warm for some time by wrapping them in several layers of paper and cloth, thus creating good insulation against cooler air. Many people prefer foods served cold, especially at a picnic in very warm weather.

There is an endless variety of foods which can go to a picnic, but the homemaker-manager should remember that the picnic is only another meal and that the same general rules apply for planning the menus. Avoid too many different kinds of food. Avoid elaborate foods that require special preparation or handling. Remember the seven basic food groups.



Ann Pillsbury, Pillsbury Mills, Inc.

Food eaten outdoors always tastes extra good.

Recipes for party refreshments

GUESS WHAT SALAD

SERVES 8-10

- | | |
|-----------------------------|---------------------------|
| 1 pkg. lemon jello | 2 ground carrots |
| 1 c. water | 6 ground radishes |
| 1½ cakes cream cheese | ½ ground green pepper |
| ½ c. chopped celery | ½ ground sweet red pepper |
| 1 t. chopped onion | ½ c. ground cabbage |
| 2 hard-cooked eggs, chopped | 1 T. mayonnaise |
| ½ c. ground cucumber | salt and pepper to taste |

DISSOLVE 1 package jello in 1 c. water.

GRIND ½ c. cucumber, 2 carrots, 6 radishes, ½ c. cabbage, and ½ each of green and red pepper, using a coarse knife on the grinder.

CHOP ½ c. celery and 1 t. onion; add to other vegetables.

CHOP 2 hard-cooked eggs.

MIX 1 T. mayonnaise with 1½ cakes of cream cheese.

ADD vegetables to gelatin and then add the cream cheese. Fold in hard-cooked eggs.

- POUR into individual molds or a pan, 8 x 8 x 2 inches. Place in the refrigerator to chill.
- UNMOLD or cut in individual-sized portions and place on lettuce leaves or other salad greens; serve with mayonnaise, French dressing, or Russian dressing.
- NOTE: For luncheon serve Guess What Salad with potato chips, buttered green beans (page 278), and hot rolls (page 159).

BAKED PEARS WITH LEMON CREAM SAUCE



Cereal Institute, Inc.

SERVES 4-8

- | | |
|------------------------|--|
| 6 large winter pears | $\frac{1}{4}$ c. butter or fortified margarine |
| 3 T. lemon juice | $2\frac{1}{2}$ c. corn flakes |
| $\frac{1}{4}$ c. sugar | |

- TURN oven to 350° F.
- MIX $\frac{1}{4}$ c. sugar and 3 T. lemon juice.
- MELT $\frac{1}{4}$ c. butter or margarine.
- WASH 6 pears; peel and halve. Dip in the lemon juice and sugar mixture, and then in butter or margarine.

ROLL in $2\frac{1}{2}$ c. corn flakes; arrange in a shallow baking dish; place remaining corn flakes in center; and bake in a moderate oven (350° F.), for 20 to 25 minutes, or until tender but not soft. Serve with lemon cream sauce.

LEMON CREAM SAUCE

1 c. sour cream	2 T. lemon juice
$\frac{1}{3}$ c. confectioners' sugar	1 t. grated lemon rind

BEAT 1 c. sour cream and $\frac{1}{3}$ c. confectioners' sugar until thick.

ADD 2 T. lemon juice and 1 t. lemon rind; beat well. Serve with baked pears.

SIDNEY'S PUNCH

SERVES 12-14

$1\frac{1}{2}$ c. sugar	2 c. orange juice, chilled
$1\frac{1}{2}$ c. water	1 c. pineapple or apricot juice, chilled
5 whole cloves	$\frac{3}{4}$ c. grapefruit juice, chilled
$\frac{1}{4}$ t. allspice	6 c. ginger ale, chilled
$\frac{1}{4}$ t. cinnamon	
$\frac{1}{4}$ t. nutmeg	

BOIL $1\frac{1}{2}$ c. sugar and $1\frac{1}{2}$ c. water for 10 minutes. Remove from heat. Add 5 cloves, $\frac{1}{4}$ t. allspice, $\frac{1}{4}$ t. cinnamon, and $\frac{1}{4}$ t. nutmeg; cover and let stand $1\frac{1}{2}$ hours.

STRAIN through a double thickness of cheesecloth into a glass jar and chill.

PREPARE 2 c. orange juice, $\frac{3}{4}$ c. grapefruit juice, and 1 c. pineapple or apricot juice; chill.

COMBINE fruit juices, sirup, and 6 c. ginger ale.

PLACE ice in tall glasses and pour punch over ice. Decorate with a slice of orange or mint leaves.

FRUIT PUNCH

SERVES 30-36

4 c. strained tea (2 t. tea to 4 c. boiling water), chilled	$\frac{1}{2}$ c. fruit pulp (apricot and banana), chilled
1 c. fruit juice (lemon, orange and grapefruit), chilled	2 c. sugar
2 c. fruit juice (apricot, pineapple, and raspberry), chilled	1 c. water
	ice

BOIL 1 c. water and 2 c. sugar for 10 minutes; chill.

MAKE 4 c. tea; strain and chill. Prepare 3 c. fruit juices and $\frac{1}{2}$ c. fruit pulp; chill. Combine all ingredients.

PLACE ice in punch bowl; pour punch over ice.
GARNISH with sliced cherries, pineapple, oranges, or raspberries.

FUDGE

2 c. sugar	$\frac{3}{4}$ c. evaporated milk
2 squares unsweetened chocolate	1 T. butter or fortified margarine
2 T. light corn sirup	1 t. vanilla
F. G. salt	

MIX 2 c. sugar, 2 T. corn sirup, 2 squares chocolate, F. G. salt, and $\frac{3}{4}$ c. milk together in a saucepan.

COOK without stirring to soft-ball stage (232° F.), when the sirup is dropped into cold water and a soft ball is formed. Remove from heat; add 1 T. butter, and cool to lukewarm.

BUTTER a pan, 8 x 8 x 2 inches.

ADD 1 t. vanilla and beat fudge until it becomes quite thick. Pour into pan and cool. Cut into 1-inch squares.

PEANUT BRITTLE

1 c. shelled, roasted peanuts	F. G. salt
-------------------------------	------------

2 c. sugar

PLACE 2 c. sugar in a heavy skillet and melt over a low heat, stirring constantly.

ADD 1 c. nuts and F. G. salt. Stir until nuts are coated. Spread in a well-buttered pan, 8 x 8 x 2 inches, and cool.

BREAK into irregular pieces with the handle of a knife.

MOLASSES BARS

MAKES 32 BARS

$\frac{3}{4}$ c. molasses	$5\frac{1}{2}$ c. oven-popped rice cereal
---------------------------	---

$\frac{1}{2}$ c. sugar

COOK $\frac{3}{4}$ c. molasses and $\frac{1}{2}$ c. sugar together over direct heat to 240° F., or when a drop of sirup will form a soft ball in cold water.

PLACE $5\frac{1}{2}$ c. rice in a buttered bowl and slowly pour sirup over it. Press into a buttered pan, 8 x 8 x 2 inches, and cut into bars when cool.

PEANUT BUTTER PINWHEELS

$\frac{1}{2}$ c. mashed potatoes	$\frac{1}{8}$ t. salt
----------------------------------	-----------------------

1 lb. confectioners' sugar, sifted	$\frac{1}{2}$ t. vanilla
------------------------------------	--------------------------

peanut butter, room temperature

SIFT 1 lb. confectioners' sugar and add $\frac{1}{8}$ t. salt.

PLACE $\frac{1}{2}$ c. mashed potatoes in a bowl; add $\frac{1}{2}$ t. vanilla, and gradually stir in the sifted sugar a little at a time.



American Dairy Association

Clever desserts can be made with a minimum of last-minute preparations. (*Above*) Two slices of baby jelly roll and a spoonful of ice cream. (*Below*) Cubes of colored gelatin with soft custard in parfait glasses.

Jell-O

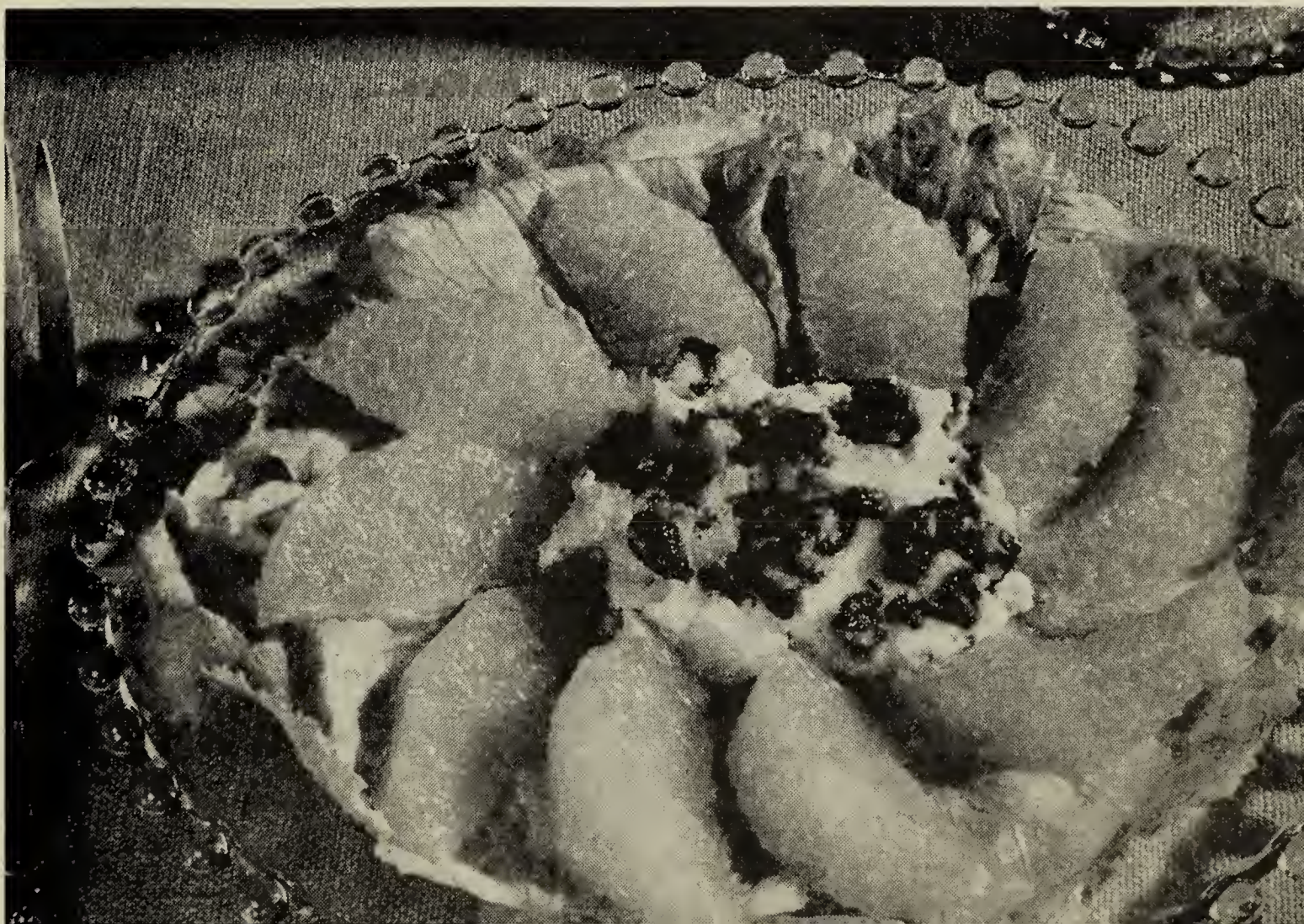




Oregon, Washington, California Pear Bureau

Simply arranged salads speed last-minute preparations. (*Above*) Fresh pear half filled with chopped fruit and nuts on salad greens. (*Below*) Grapefruit sections around a cheese and raisin center.

Sun Maid Raisin Growers



- PRESS** on waxed paper in the shape of a square or rectangle. Spread with peanut butter.
- ROLL** as for a jelly roll, beginning at the wide end. When completed, wrap in waxed paper and chill for at least three hours.
- SLICE** in pieces $\frac{1}{4}$ inch thick.
- NOTE:** This is a candy that is different.

POPCORN BALLS

- | | |
|---------------------------|------------------------------------|
| 8 c. popped corn | 1 t. salt |
| 1 c. sugar | 1 T. butter or fortified margarine |
| $\frac{1}{4}$ c. molasses | $\frac{3}{4}$ c. water |
- POP** a small quantity of corn at a time in a corn popper or heavy skillet and place in a large buttered bowl. Measure 8 c.
- PLACE** 1 c. sugar, $\frac{1}{4}$ c. molasses, 1 t. salt, 1 T. butter, and $\frac{3}{4}$ c. water in a saucepan and cook to 250° F. or until a drop of sirup will form a hard ball in cold water, stirring occasionally.
- POUR** sirup over corn. When cool enough, shape quickly into 6 or 8 balls. A little butter on one's hand prevents corn from sticking.
- NOTE:** Each ball may be wrapped in cellophane or waxed paper to keep it fresh. Wrapped in colored cellophane, popcorn balls make pretty table or Christmas tree decorations.

BUTTERED POPCORN

- | | |
|------------------|------------------------------------|
| 8 c. popped corn | 2 T. butter or fortified margarine |
| salt | |
- POP** corn in a corn popper or heavy skillet and place in a large bowl.
- ADD** 2 T. melted butter or fortified margarine and salt to taste.
- NOTE:** Popcorn served with milk makes a good breakfast cereal. Popcorn may be used instead of croutons to top soup.

TAFFY APPLES

- | | |
|-----------------------------|-------------------------------------|
| 1 c. sugar | $\frac{1}{3}$ t. cinnamon flavoring |
| $\frac{1}{4}$ c. corn sirup | $\frac{1}{2}$ t. red coloring |
| $\frac{1}{2}$ c. water | 6 red apples |
| | 6 skewers |
- WASH** and dry 6 apples.
- COOK** 1 c. sugar, $\frac{1}{4}$ c. corn sirup, and $\frac{1}{2}$ c. water to 300° F. or hard-crack stage, when the sirup will make a cracking sound when dropped into cold water. Remove from fire and add $\frac{1}{2}$ t. red coloring and $\frac{1}{3}$ t. cinnamon. Cool slightly.
- PLACE** apples on skewers and dip one at a time into sirup, twirling to remove excess sirup, and place on waxed paper.

SUGARED WALNUTS

2 c. sugar	1 c. water
$\frac{1}{2}$ t. cream of tartar	$1\frac{1}{4}$ c. walnuts, shelled.
1 t. cinnamon	

SHELL $1\frac{1}{4}$ c. walnuts, trying to keep nuts in halves or quarters.

COOK 2 c. sugar, $\frac{1}{2}$ t. cream of tartar, 1 t. cinnamon, and 1 c. water to 250° F. or hard-ball stage, when sirup dropped into cold water forms a very hard ball.

ADD walnuts, and continue to cook until the sugar begins to discolor, Stir constantly. Drop by fork on waxed paper. Store in an airtight container when nuts are cool and dry.

STUFFED DATES

24 dates	2 T. candied orange peel, chopped.
$\frac{1}{2}$ c. chopped nuts	

REMOVE stones from 24 dates by slitting them along the side.

CHOP $\frac{1}{2}$ c. English walnuts, pecans, almonds or Brazil nuts; add 2 T. chopped candied orange peel to nuts.

FILL cavity of date with nut mixture and roll in confectioner's or granulated sugar.

STUFFED FIGS

18 figs	$1\frac{1}{2}$ T. candied ginger and pineapple,
$\frac{1}{2}$ c. chopped nuts	chopped

MAKE an opening in the stem end of 18 figs.

CHOP $\frac{1}{2}$ c. nuts; add $1\frac{1}{2}$ T. ginger and chopped pineapple; mix.

FILL cavity of figs with mixture and roll figs in granulated sugar.

PRALINES

2 c. brown sugar, firmly packed	2 T. butter or fortified margarine
$\frac{1}{2}$ c. water	1 t. vanilla
2 c. shelled pecans	

COOK 2 c. sugar, $\frac{1}{2}$ c. water, and 2 T. butter or margarine slowly to 246° F., when sirup dropped in cold water will form a firm ball.

REMOVE from heat; cool slightly; add 1 t. vanilla; beat lightly; add 2 c. pecans and drop by teaspoonfuls on waxed paper. When set, wrap each praline in waxed paper.

SALTED NUTS

(Peanuts, pecans, almonds)

1 c. shelled pecans, unroasted pea-	2 T. butter
nuts, or blanched almonds	salt

SHELL	1 c. nuts, being careful that all small pieces of shell have been removed.
REMOVE	brown skins from raw peanuts.
MELT	2 T. butter in a shallow baking pan and add nuts.
ROAST	in a moderate oven (350° F.) until a golden brown. Turn several times with a spatula to insure even browning. Place on clean absorbent paper to absorb excess fat.
TRANSFER	to another absorbent paper, salt, and cool. Store in a tightly covered jar.

HALLOWEEN SUPPER



Swift and Company

1 lb. link sausage
 ¼ c. water
 ¼-oz. pkg. noodles
 ½ t. salt
 1 c. bread crumbs

3 T. sausage drippings
 5. c. boiling water
 4 peach halves
 raisins

Cream gravy

3 T. flour
 4 T. sausage drippings

2 c. milk

- COOK** one 4-oz. package noodles in 5 c. of boiling salted water until tender, about 12 minutes. Drain.
- DECORATE** 4 peach halves with raisins, making eyes, nose, and mouth.
- PAN-FRY** link sausages in a frying pan. (Drain off drippings as sausage cooks). Add $\frac{1}{4}$ c. water, cover, and steam for 5 minutes.
- HEAT** 3 T. drippings in a frying pan; add cooked noodles and 1 c. bread crumbs; cook for 5 minutes; remove from skillet to a warm platter.
- BLEND** 3 T. flour with 4 T. sausage drippings and slowly add 2 c. milk and cook until thick, stirring constantly.
- ARRANGE** sausage on top of noodles; garnish with peach halves and parsley. Serve with milk gravy.
- NOTE:** With Halloween Supper, serve tomato and lettuce salad, corn muffins (page 132), and broiled grapefruit (page 53).

CANDIED ORANGE OR GRAPEFRUIT PEEL

- 2 c. fruit peel (2 grapefruit or 4 oranges)
1 c. sugar
- $\frac{1}{2}$ c. water
 $\frac{2}{3}$ c. sugar in which to roll peel after cooking
- REMOVE** peel from 2 grapefruit or 4 oranges and cut in strips $\frac{1}{4}$ inch wide and $2\frac{1}{2}$ to 3 inches long. Cover with boiling water and cook until tender. Drain.
- COOK** 1 c. sugar and $\frac{1}{2}$ c. water to soft-ball stage (250° F.), when sirup dropped into cold water will form a soft ball.
- ADD** peel and cook until transparent and sirup has almost boiled away. Remove from heat and drain on a cake rack; cool.
- ROLL** each piece in sugar and dry thoroughly.

CLASS ACTIVITIES

- Plan suitable refreshments and decorations for the following types of parties: Halloween party, New Year's Eve party, Valentine party, and teenage picnic.
- Discuss the following questions:
 - How often do you think you should be allowed to have a party at home? Under what conditions?
 - How much should a successful after-the-movies party cost for six people?
 - What are your responsibilities when you have a party at home? How can you repay any assistance that you might have from your mother or other members of your family?

FUN WITH FOOD AT HOME

1. With your mother's permission, give a new type of party, one which you have never tried before. Report its success.
2. Assist another member of your family in giving a party.

A SUMMARY OF YOUR STUDY OF FOOD MAKES THE PARTY

Study of this unit is intended to show you how all that you have learned about food can be applied in planning refreshments for parties. The list of topics below indicate the abilities which you should have acquired.

Management problems

Planning menus for parties.
Planning time schedules for party preparation.
Good refreshments for the least expense.
Holiday dinners.

Party techniques

Invitations
Informal teas
Serving formal teas
Buffet meals
Light refreshments
Packing picnic lunches

Food skills

Tea sandwiches
Candies
Christmas cookies
Doughnuts

WHAT DO YOU KNOW ABOUT FOOD FOR PARTIES?

Check your understanding of food for parties and ways of serving it according to the following tests.

To test your knowledge of party techniques

This is a true and false test concerning the correct procedures at various types of parties. On a separate sheet of paper write the number of each statement and the word "true" or "false" after it. **Do not write in this book.**

1. Tea sandwiches are intended for formal tea parties.
2. A fancy salad is generally served at informal tea parties.
3. A buffet-style meal is suitable for a Sunday night supper party.
4. "Finger foods" only should be served at informal teas.
5. A telephone invitation is correct for a small tea.
6. Comfortable seats should be provided for guests at a formal tea.
7. Flowers from the florist are essential for a party dinner table.
8. Food can be chosen to help work out a color scheme on a dinner table.

9. The best dessert for a Christmas or Thanksgiving dinner is always a sweet.
10. For a successful party, food and fun must be planned together.

To test your knowledge of different types of parties

On a separate sheet of paper write the number of each question, and opposite the number write the word or words that are missing in each case. **Do not write in this book.**

1. Do not have much food at a _____.
2. Plum pudding is a traditional food for _____.
3. You may pull the shades and light the candles at a _____.
4. Service dishes should be arranged conveniently for self service at a _____.
5. Turkey was served at the first _____.
6. Food and beverage may be served from a tray at an _____.

To test your all-round knowledge of good food combinations

What is wrong in each of the following menus? On a separate sheet of paper write the title of each menu, and opposite each title, list the faults of each menu.

<i>Picnic lunch</i>	<i>Luncheon party</i>	<i>Informal tea</i>
Scalloped Potatoes	Creamed Chicken	Ham Sandwiches
Baked Beans	Scalloped Cauliflower	Potato Salad
Cheese Sandwiches	Rolls (enriched white flour)	Orange Ice
Chocolate Cake	Vanilla Ice Cream	
Ice Cream	Angel Food Cake	

REFERENCES FOR FURTHER READING

- Allen, Betty, and Briggs, M. P., *Behave Yourself!* J. B. Lippincott Company, 1945. Pp. 31-71.
- Brobeck, Florence, *Serve It Buffet.* M. Barrows and Company, Inc., 1944.
- Browns, The, Cora, Rose, and Bob. *Outdoor Cooking.* The Greystone Press, 1940.
- Boykin, Eleanor, *This Way, Please!* The Macmillan Company, 1940. Pp. 192-220.
- Harris, F. L., and Henderson, R. A., *Foods.* D. C. Heath and Company, 1938. Pp. 293-309.
- Harris, J. W., and Speer, E. L., *Everyday Foods.* Houghton Mifflin and Company, 1946 and 1941. Pp. 315-340.

- Maltby, M. L., *It's Fun to Cook*. The John C. Winston Company, 1938. Pp. 24-50, 94-142.
- Powers, Margaret, *The Party Table*. The Manual Arts Press, 1946.
- Reid, Lillian N., *Personality and Etiquette*. D. C. Heath and Company, 1940. Pp. 117-166.
- Woodward, Elizabeth, *Let's Have a Party*. Thomas Y. Crowell Company, 1946.

APPENDIX I

TABLE OF NUTRITIVE VALUES OF FOODS *

The following signs have been used where vitamin values have not been determined so that they can be definitely stated.

A plus mark (+) means present in significant amount, but not measured as to quantity, (++) more.

Data enclosed in parentheses are based on evidence less direct than in the majority of cases.

FOOD	Approximate measure	Weight grams	Cal- ories	Protein grams	Carbo- hydrate grams
<i>Milk and Milk Products</i>					
Milk, whole	1 cup	240	166	7.9	12.0
Milk, undiluted, evaporated	1 cup	240	336	16.0	24.2
Milk, dried whole	½ cup	50	256	13.3	18.2
Milk, skim, fresh	1 cup	240	89	8.1	12.2
Buttermilk	1 cup	240	79	7.9	9.3
Cheese, American	1 ⅛ cube	23	93	5.5	0.14
Cheese, cottage (skim)	2 tbsp.	30	31	7.0	—
Cream, thin (18.5% fat)	2 tbsp.	30	59	0.8	1.0
Cream, thick (40% fat)	2 tbsp.	30	114	0.7	1.0
Butter	1 tbsp.	14	103	0.14	—
Ice cream, commercial	½ cup	100	219	2.5	18.2
<i>Fruits, Fresh and Canned</i>					
Apple, fresh, whole	1 medium.	170	107	0.68	24.2
Applesauce	⅔ cup	100	157	0.2	37.2
Banana	1 medium	100	99	1.2	23.0
Blackberries, fresh	7 tbsp.	100	62	1.3	11.9
Cantaloupe	¼ melon 5" diam.	100	40	0.6	9.3
Cherries, fresh	⅔ cup	100	68	1.1	14.8
Cranberries, fresh	1 cup	100	53	0.4	11.3
Cranberry sauce	½ cup	100	233	—	57.5
Grapefruit juice	½ medium grapefruit		44	0.5	10.1
Grapefruit, whole	½ medium 4" diam.	100	44	0.5	10.1
Grapes	½ cup or 20 Malaga size	100	78	1.4	14.9

A dash (—) means that the amount present, if any, is probably negligible.

A blank space means that satisfactory data were not at hand when the table was made.

Where a range is given, it is advisable to use a value near the middle of the range when the food is eaten raw; and the minimum of the range when the food is cooked.

<i>Fat grams</i>	<i>Calcium grams</i>	<i>Phos- phorus grams</i>	<i>Iron milli- grams</i>	<i>Vitamin A international units</i>	<i>Thiamin (Vitamin B₁) micrograms</i>	<i>Ascorbic Acid (Vitamin C) milligrams</i>	<i>Riboflavin (Vitamin G) micrograms</i>
9.6	.283	.223	0.48	384-540	96-156	5	468-576
19.4	.573	.451	0.97	777-1092	194-316		938-1165
14.3	(.47)	(.37)	(0.8)	650-900	157		650-950
0.72	.293	.230	0.60				
1.2	.252	.233	0.7		36-120	3-5	192
7.8	.210	.161	0.3	454-910	9-11	—	102-136
0.3	.024	.079		18-24	+		
5.5	.030	.027	0.06	300-450	9-12	—	45-60
12.0	.027	.021	0.03	600-750	7-10	—	36-48
11.3	.002	.002	0.03	490-700	—	—	—
15.1	(.08)	(.06)	(0.2)	(600)	(10)	1	55
0.85	.012	.020	0.61	68-170	64.	13	
0.8	.005	.009	0.20	(60)	(20)	3-4	
0.2	.008	.028	0.64	160-400	50-100	7-8	45-80
1.0	.017	.019	0.90	80-300	25	3	
—	.016	.015	0.39	400-2400	50-65	26-34	75
0.5	.019	.030	0.40	+	51	8-10	
0.7	.013	.011	0.44	10-20		10-13	
0.3	(.017)	(.01)	(0.40)	(10-20)		(5-10)	
0.2	.021	.020	0.30	21	50-100	38-41	20-100
0.2	.021	.020	0.30	21	50-100	38-41	20-100
1.4	.019	.035	0.70	20-60	30-60	2-3	

TABLE OF NUTRITIVE VALUES OF FOODS (CONTINUED)

<i>FOOD</i>	<i>Approximate measure</i>	<i>Weight, grams</i>	<i>Cal- ories</i>	<i>Protein grams</i>	<i>Carbo- hydrate grams</i>
Grape juice	½ cup (scant)	100	75	0.4	18.5
Huckleberries (blueberries)	¾ cup	100	68	0.6	15.1
Lemon juice	½ cup	100	44	0.9	8.7
Orange juice	½ cup (scant)	100	55	0.6	13.1
Orange, whole	1 medium	215	110	1.7	25.0
Peaches, canned	1 large half— 1 ½ tbsp. juice	100	47	0.7	10.8
Peaches, fresh whole	1 medium	100	51	0.5	12.0
Pear, fresh whole	1 large	100	70	0.7	15.8
Pineapple juice, canned	½ cup (scant)	100	60	0.3	12.8
Pineapple, canned	2 slices, 3 tbsp. juice	100	63	0.4	15.0
Pineapple, fresh	½ cup sliced	100	58	0.4	13.7
Plums	3—1 ½" diam.	100	56	0.7	12.9
Raspberries, fresh red	½ cup	100	67	1.1	14.4
Rhubarb	1 cup (raw)	100	18	0.5	3.8
Strawberries, fresh	10 large: ½-¾ cup	100	41	0.8	8.1
Watermelon	slice 1" x 2 ½" x 2 ½"	100	30	0.4	6.7
<i>Fruits, Dried</i>					
Apricots	½ cup, packed	100	278	4.7	62.5
Apricots, stewed	½ cup	153	196	2.0	47.0
Dates	14 dates	100	347	2.1	78.4
Figs	6-7 whole figs	100	317	4.3	74.2
Prunes	12 medium	100	301	2.1	73.3
Prunes, stewed	4 prunes—4 tbsp. juice	159	199	0.95	49.0
Raisins	¾ cup	100	345	2.6	76.1
<i>Vegetables, Fresh and Canned</i>					
Asparagus	12 stalks 5" long, cooked	100	26	2.2	3.9
Beans, lima	⅔ cup	100	131	7.5	23.5
Beans, string or snap	½ cup, cooked	62	26	1.5	4.8
Beets	2 beets—2" diam.	100	45	1.6	9.6
Beet greens	¾ cup (scant) cooked	100	33	2.0	5.6
Broccoli	⅞ cup, cooked	100	37	3.3	5.5
Brussels sprouts	⅔ cup	100	58	4.4	8.9

<i>Fat grams</i>	<i>Calcium grams</i>	<i>Phos- phorus grams</i>	<i>Iron milli- grams</i>	<i>Vitamin A international units</i>	<i>Thiamin (Vitamin B₁) micrograms</i>	<i>Ascorbic Acid (Vitamin C) milligrams</i>	<i>Riboflavin (Vitamin G) micrograms</i>
—	.011	.010	0.30	(30-60)			
0.6	.025	.020	0.90	20-80	45	4-10	15
0.6	.022	.011	0.60		30-90	52-60	
—	.024	.018	0.40	50-400	75-145	52-56	28-90
0.4	.052	.039	0.86	108-860	161-312	112-120	60-194
0.1	.009	.013	0.20			3-5	
0.1	.010	.019	0.33	yellow 1000-2000 white 0-100	20-70	7-10	45
0.4	.015	.018	0.32	10-15	30-95	3-5	20-150
0.3	(.01)	(.01)	(0.10)	40-60	50-100	5-10	20-30
0.1	.005	.009	0.30	20-30	63	10	20-30
0.2	.008	.011	0.37	40-60	80-125	13-25	50-80
0.2	.020	.027	0.56		48-200	4-7	
0.6	.024	.027	0.88	130	25	8-15	
0.1	.044	.018	0.56	100	25	12-24	
0.6	.034	.028	0.68	60-90	25	25-50	
0.2	.007	.013	0.23	50-100	30-40	6-8	30-40
1.0	.065	.120	7.60	6000-15000	60-120	2-12	240-300
—	(.030)	(.046)	(3.0)	(2295-4590)	(23-46)		(61-77)
2.8	.070	.056	3.56	60-300	60-100	—	
0.3	.161	.116	2.87	50-90	80-180	—	85-125
—	.058	.085	2.85	400-2400	175-225	0-8	50-650
—	(.032)	(.048)	(1.59)	(159-1272)	(95-127)	(0-3)	(32-318)
3.3	.060	.132	2.99	10-100	100-200	—	125
0.2	.021	.040	1.0	300-700	15-180	15-40	++
0.8	.028	.133	2.40	+	250-350	15-35	250
0.5	.034	.031	0.7	372-1116	34-59	6-12	40-93
0.1	.028	.042	0.85	100	25-95	3-5	125
0.3	.094	.040	3.24	++		35	625
0.2	.140	.068	1.37	3000-9000	80-100	50-130	200-500
0.5	.027	.121	1.17	300-500	171	13-50	+

TABLE OF NUTRITIVE VALUES OF FOODS (CONTINUED)

FOOD	Approximate measure	Weight grams	Cal- ories	Protein grams	Carbo- hydrate grams
Cabbage, chopped	½ cup	45	14	0.7	
Cabbage, buttered	½ cup, cooked	108	67	1.7	
Carrots	½ cup	85	38	1.0	7.9
Cauliflower	1 cup, chopped	100	31	2.4	4.9
Celery, raw	4 medium stalks	100	22	1.3	3.7
Chard	⅔ cup, cooked	100	25	1.4	4.4
Collards	½ cup, cooked	100	41	4.0	7.3
Corn, canned	⅔ cup	100	98	2.8	19.0
Corn, ears	½ cup—2 ears 6" long	100	108	3.7	20.5
Cucumbers, raw	14 slices, ⅛" thick	100	14	0.7	2.7
Dandelion greens	⅔ cup, cooked	100	52	2.7	8.8
Escarole (chicory)	5-6 leaves	100	21	1.6	2.9
Kale	1 cup, cooked	100	50	3.9	7.2
Lettuce, headed	¼ large head	71	12	0.8	
Lettuce, loose-leaf	6 large leaves	100	18	1.2	2.9
Mustard greens	⅔ cup, cooked	100	28	2.3	4.0
Okra	10-12 pods or 2 cups canned	100	38	1.6	7.4
Onions	1½ to 2 onions	100	48	1.6	9.9
Parsnips	⅔ cup, cubes	100	65	1.6	13.5
Peas, canned, drained	⅔ cup	100	47	3.0	8.3
Peas, green, shelled	½ cup (scant)	67	67	4.4	12.0
Peppers, green	1 pepper—3-4" long	100	29	1.2	5.7
Potatoes, sweet baked	½ medium	85	100	1.5	24.0
Potatoes, white baked	1 medium	85	72	1.7	16.2
Rutabagas	⅔ cup—½" cubes	100	41	1.1	8.9
Sauerkraut	⅔ cup	100	27	1.7	3.8
Spinach	⅔ cup, cooked	100	25	2.3	3.2
Squash, winter	½ cup, cooked	100	37	1.5	7.3
Tomato, whole, raw or canned	½ cup	120	28	1.2	4.8
Tomato juice, canned	½ cup (scant)	100	23	1.0	4.0
Turnips	½ cup	71	25	0.78	5.0
Turnip greens	½ cup, cooked	63	23	1.8	3.4
Water cress	1 bunch 3" long 3" diam.	100	23	1.7	3.3
<i>Vegetables, Dried</i>					
Beans, lima	⅔ cup	100	350	18.1	65.9
Beans, lima, cooked	⅓ cup	80	105	5.5	20.0
Beans, navy	½ cup	100	345	22.5	59.6
Beans, baked	⅓ cup	77	99	5.3	15.0
Peas	½ cup	100	355	24.6	62.0
Soybeans	½ cup	100	350	34.9	(12.0)
Lentils	½ cup	100	349	25.7	59.2

<i>Fat grams</i>	<i>Calcium grams</i>	<i>Phos- phorus grams</i>	<i>Iron milli- grams</i>	<i>Vitamin A international units</i>	<i>Thiamin (Vitamin B₁) micrograms</i>	<i>Ascorbic Acid (Vitamin C) milligrams</i>	<i>Riboflavin (Vitamin G) micrograms</i>
	.021	.015	0.2	21	36	13	69
	.048	.037	0.5	176	64	3	160
0.3	.038	.034	0.50	1870-3400	51-119	2-4	64-106
0.2	.022	.060	0.94	35-60	130-200	48-94	150-220
0.2	.078	.046	0.62	5-50	20-50	6-8	30-55
0.2	.100	.150	3.09	13000-27000		10-20	+
0.6	.202	.074	1.66	2000-6000	150-250	30-60	250
1.2	(.007)	(0.10)	(0.40)	yellow ++	(100)	6	
1.2	.006	.103	0.47	yellow ++	120-150	8-11	+
0.1	.006	.018	0.33	15-50	90	2-13	150
0.7	.084	.035	3.05	13000-27000	150-225	5-40	
0.3	.029	.027	1.53	13000-27000	—	6-10	75-400
0.6	.181	.067	2.54	13000-27000	120-190	50-100	400-600
	.012	.029	0.30				
0.2	.069	.028	1.5	700-7000	50-125	6-21	100-245
0.3	.221	.066	5.0	13000-27000	138		375
0.2	.075	.053	0.60	300-600	126	10	
0.3	.041	.047	0.48		25-100	7-11	28-62
0.5	.060	.076	0.77		120-190		
0.2	.016	.106	1.3	++	200-300	2-10	80-200
0.26	.015	.083	1.4	660-858	178-327	10-17	165
0.2	.012	.028	0.40	++	20-30	90-150	
0.59	.017	.038	0.65	850-4250	77-115	6-13	68-85
0.09	.011	.045	0.86	26-43	81-140	6-13	34-68
0.1	.056	.047	0.52	10-20	65-95	20-30	50-100
0.5	.039	.009	3.30	25	30	0-10	
0.3	.078	.046	2.55	13000-27000	95-155	15-50	250-400
0.3	.019	.028	0.55	2000-4000	48	3	81
0.36	.008	.025	0.5	600-1440	84-138	25-29	44-76
0.3	.007	.015	(0.40)	500-1200	70-115	21-24	37-63
0.1	.040	.033	0.37	7-14	46-67	14-21	36-71
0.25	.219	.031	2.2	8190-17010	87-113	13-38	473
0.3	.157	.046	2.97	800-3000	100-150	43-66	150-300
1.5	.072	.386	9.7	+	450-600	—	790
0.5	.057	.278	6.9	+			
1.8	.148	.463	10.5		315-510	—	+
1.9	.047	.141	1.5	31-53	101	—	+
1.0	.077	.411	5.7	+	300-620		250-380
18.1	.235	.670	6.7	100	1200		900
1.0	.102	.383	8.6		300-600	—	190

TABLE OF NUTRITIVE VALUES OF FOODS (CONTINUED)

FOOD	Approximate measure	Weight grams	Cal- ories	Protein grams	Carbo- hydrate grams
<i>Bread and Cereals</i>					
Baking powder biscuits	2 small	30	125	3.1	17.5
Bread, Boston brown	1 slice, 3" diam. $\frac{7}{8}$ " thick	50	148	3.0	27.0
Bread, rye	1 slice, $3\frac{1}{2}$ " x 4" x $\frac{1}{2}$ "	17	43	1.5	9.0
Bread, enriched	1 slice	20	52	1.8	10.6
Bread, white	1 slice	20	52	1.8	10.6
Bread, white, raisin	$1\frac{1}{2}$ slices	30	88	2.0	15.3
Bread, whole wheat	1 slice	26	64	2.5	12.9
Bread, whole wheat raisin	$1\frac{1}{2}$ slices	30	81	2.1	15.9
Corn flakes	1 cup (scant)	30	115	2.4	26.0
Corn meal, cooked	$\frac{1}{2}$ cup	128	84	1.9	18.6
Corn meal, dry	$\frac{1}{6}$ cup	25	89	2.3	18.8
Crackers, graham	1 cracker $2\frac{1}{2}$ " x $2\frac{1}{4}$ " x $\frac{1}{4}$ "	10	42	1.0	7.3
Crackers, Ry-Krisp	1 cracker $1\frac{7}{8}$ " x $1\frac{3}{8}$ "	7	23	1.0	4.5
Crackers, saltine	1 cracker 4" square	4	17	0.5	2.5
Crackers, soda	1 cracker $2\frac{3}{4}$ " x $2\frac{1}{2}$ " sq.	6	25	0.5	4.5
Crackers, Uneeda	1 Uneeda $2\frac{1}{2}$ " square	6	24	0.5	4.5
Cream of Wheat, cooked new 5-min.	$\frac{1}{2}$ cup	116	48	1.6	9.8
Cream of Wheat, dry new 5-min.	$1\frac{1}{2}$ tbsp.	15	55	1.7	10.9
Farina, dark, cooked	$\frac{1}{2}$ cup	113	67	2.0	
Hominy grits, cooked	$\frac{1}{2}$ cup	100	82	2.2	17.8
Hominy grits, dry	$2\frac{1}{2}$ tbsp.	30	107	2.5	23.7
Macaroni, cooked	$\frac{1}{2}$ cup	100	89	3.0	15.8
Macaroni, dry	4-5 tbsp.; or 3 sticks 9" long	30	107	4.0	22.2
Muffins, one egg	2 average	100	285	8.3	43.0
Muffins, whole wheat (no egg)	2 average	100	245	7.2	48.3
Oatmeal, cooked	$\frac{1}{2}$ cup	100	66	2.7	11.1
Oatmeal, dry	3 tbsp.	15	60	2.4	10.1
Ralston, cooked	$\frac{3}{4}$ cup	125	103	4.0	21.0
Ralston, dry	3 tbsp.	30	103	4.0	21.0
Rice, brown	3 tbsp.	30	106	2.4	22.8
Rice, white, cooked	$\frac{1}{2}$ cup	100	93	1.8	21.3
Rice, white, dry	3 tbsp.	30	105	2.4	23.7

<i>Fat grams</i>	<i>Calcium grams</i>	<i>Phos- phorus grams</i>	<i>Iron milli- grams</i>	<i>Vitamin A international units</i>	<i>Thiamin (Vitamin B₁) micrograms</i>	<i>Ascorbic Acid (Vitamin C) milligrams</i>	<i>Riboflavin (Vitamin G) micrograms</i>
5.0	.022	0.32	0.20		2-3		22
3.1	.064	.093	1.5		62-85	—	35
0.1	.004	.025	0.27	—	15-32	—	+
0.3	.006	.019 ₁	0.4		40-180		40-140
0.3	.006	.019	0.16		11-17	—	8-20
1.8	.016	.026	0.24		(25)	—	15
0.3	(.013)	(.039)	(0.5)		62-104		26
0.9	.016	.046	0.57	26	(90)	—	(30)
0.1	(.004)	(.034)	0.8	—		—	
0.3	.003	.033	0.23	—	—	—	—
0.4	.004	.038	0.22	{ yellow 175-188	13-75	—	20
0.9	(.002)	(.020)	(0.2)		+	—	
—		.027	0.20				
0.5	.001	.004	0.10				
0.5	.001	.006	0.10				
0.5	.001	.006	0.10				
0.2	.068	.078	5.6		70		
0.2	.075	.088,	6.3		81		
	.0085	.079	0.9	2	34		44
0.2	(.002)	(.015)	(0.20)			—	
0.2	.003	(.021)	(0.27)			—	
1.5	.004	.024	0.20		(5-10)		
0.3	.006	.043	0.36		(7-15)		
8.7	(.080)	(.110)	(1.0)	(250)	15-20	—	115
2.5	(.110)	(.130)	(3.0)	(80)	90-120		75
1.2	(.012)	(.07)	(0.9)		50-135		(30)
1.0	.009	.008	0.7		52-116	—	(30)
0.5	.010	.120	2.0				
0.5	.010	.120	2.0				
0.6	.019	.101	0.6	15-30	72-90	—	
0.1	(.003)	(.025)	(0.30)	—		—	
0.1	.003	.03	0.27	—	9-12	—	

TABLE OF NUTRITIVE VALUES OF FOODS (CONTINUED)

FOOD	Approximate measure	Weight grams	Cal- ories	Protein grams	Carbo- hydrate grams
Tapioca, minute or pearl, dry	2½ tbsp.	30	107	0.1	26.4
Wheat, shredded	1 biscuit	30	110	3.1	23.3
<i>Flour</i>					
Enriched	¾ cup sifted	100	353	11.2	74.9
Rye	¾ cup sifted	100	350	6.8	78.7
Wheat, white	⅞ cup sifted	100	353	11.2	74.9
Wheat, whole	¾ cup sifted	100	359	13.8	71.9
<i>Eggs</i>					
Egg, whole	1 medium	54	80	7.2	—
Egg, white	1 white	28	14	3.5	—
Egg, yolk	1 yolk	15	55	2.4	—
<i>Meats, Poultry</i>					
Bacon, well cooked	9-10 small slices	30	155	5.0	—
Beef, dried	2 thin slices 4" x 5"	30	54	9.0	—
Beef, lean muscle	2.7 oz.	77	116	16.4	—
Beef liver, raw	2.7 oz.	77	99	15.8	1.3
Chicken	½ medium broiler	90	98	19.3	—
Frankfurters	1—5¼" long—1" diam.	50	125	9.8	0.5
Ham, lean	3 oz.	90	206	22.5	—
Lamb, leg	3 oz.	90	207	16.2	—
Pork chop (lean meat only)	2.4 oz.	69	233	11.4	—
Pork sausage	5 sausages 2" x ¾"	100	452	11.3	—
Turkey, dark meat	3½ oz.	100	291	21.1	—
Turkey, light meat	3½ oz.	100	291	21.1	—
Veal, leg, lean	3 oz.	90	129	18.6	—
<i>Fish and Shellfish</i>					
Bluefish	3 oz.	90	80	14.4	—
Clams	⅓ cup	100	61	10.5	3.0
Cod	3 oz.	90	71	16.8	—
Codfish balls	2 balls—2" diam.	96	200	10.4	—
Crab meat	⅔ cup (scant)	90	71	14.2	0.6
Flounder or sole	3 oz.	90	56	12.7	—
Haddock	3 oz.	90	64	15.4	—
Halibut	3 oz.	90	109	16.7	—
Herring, fresh	3 oz.	90	128	17.5	—
Herring, smoked	3 oz.	90	268	33.2	—
Lobster meat	¾ cup (scant)	100	84	18.1	0.5
Mackerel	3 oz.	90	123	16.8	—
Oysters	4 large	100	50	6.2	3.7
Salmon, canned	⅔ cup	77	147	16.0	—

<i>Fat grams</i>	<i>Calcium grams</i>	<i>Phos- phorus grams</i>	<i>Iron milli- grams</i>	<i>Vitamin A international units</i>	<i>Thiamin (Vitamin B₁) micrograms</i>	<i>Ascorbic Acid (Vitamin C) milligrams</i>	<i>Riboflavin (Vitamin G) micrograms</i>
—	.0048	.0018	0.48		—	—	
0.4	.0120	.0970	1.30		+		+
1.0	.110		1.3		360		260
0.9	.0180	.2890	1.3		165-220		60
1.0	.0150	.1010	1.0		60-100		40
1.9	.0350	.3060	3.5		330-500		100-200
5.7	.034	.120	1.7	540-1080	76-86	—	151-227
	.0036	.0042	0.02			—	42-84
5.1	.0202	.091	1.32	375-750	52-66		57-112
15.0	.0039	.0744	1.05		(30)		(32)
1.9	.0054	.0978	1.35		+		++
6.1	.010	.157	2.3	8-39	85-162	—	139-200
3.4	.008	.283	6.3	3850-7700	231-323	+	1386-2002
2.2	.0017	.2088	2.80	+	80-342	—	90-180
9.3	(.0050)	(.1100)	1.25		+		+
12.8	.0180	.2160	2.7		540-1285	—	180-270
15.7	.0090	.1863	1.35		180-270	—	252
20.7	.004	.075	1.0		483-996		155-175
41.2	(.0020)	(.0270)	(1.0)		++		
22.9	.023	.422	5.9		+		
22.9	.021	.374	5.2		+	—	
6.0	.0126	.2061	2.3		(135)	—	338
1.0	.0189	.2016	0.99		+	—	+
0.8	.0950	.0930	4.4	10-30	+		(15)
0.4	(.0090)	(.1665)	(2.7)	10	25-108	—	+
	.024	.140	1.4	290	6		90
1.3	.0144	.1620	0.90		+	—	
0.5	(.0333)	(.1440)	0.9		+	—	
0.3	(.0162)	(.1800)	0.9	6	+	—	+
4.7	(.0090)	(.1800)	(0.9)		75-162	—	+
6.3	(.0180)	(.1980)	(0.9)		+	—	
14.2	(.0360)	(.3960)	(1.8)		+	—	
1.1	(.0600)	(.2800)	(1.0)				
6.2	(.0099)	.2457	(0.9)		+	—	
1.2	.056	.150	5.8	150-300	200-300	3	
8.6	.052	.220	1.0	15-462	+	—	154

TABLE OF NUTRITIVE VALUES OF FOODS (CONTINUED)

<i>FOOD</i>	<i>Approximate measure</i>	<i>Weight grams</i>	<i>Cal- ories</i>	<i>Protein grams</i>	<i>Carbo- hydrate grams</i>
Salmon, fresh	3 ozs.	90	183	19.8	—
Sardines, canned	12 small or 6 large	90	284	17.2	—
Shrimp, canned, dry pack	½–¾ cup	100	112	25.5	—
Tuna fish, canned	½ cup	100	208	26.6	—
<i>Nuts and Nut Butter</i>					
Almonds, shelled	24–30 nuts	30	194	6.3	5.1
Brazil nuts	4 nuts	30	209	5.1	2.1
Coconut, shredded, dried	2 tbsp.	12	68	0.5	5.3
Peanuts, roasted	33–35 single	30	164	7.7	7.3
Peanut butter	1 tbsp. (scant)	17	103	4.9	2.9
Pecans, shelled	12 medium	30	220	2.9	4.6
Walnuts, English, shelled	8–16 nuts	30	210	5.5	3.9
<i>Soups</i>					
Pea soup, canned	½ cup	120	61	4.3	9.1
Split pea soup	⅔ cup	170	100	6.9	
Tomato soup, canned	½ cup	120	88	1.5	13.0
<i>Fats and Salad Oils</i>					
Cottonseed oil or fat	1 tbsp.	11	100		
French dressing	1 tbsp.	17	100		
Lard	1 tbsp.	11	100		
Margarine with Vitamin A	1 tbsp.	14	105	0.17	—
Mayonnaise	1 tbsp.	15	108	0.2	0.4
Olive oil	1 tbsp.	11	100		
<i>Sugar and Sweets</i>					
Honey	1 tbsp.	31	100	0.1	20.3
Jelly or jam	1 tbsp.	19	59	0.2	14.6
Molasses	1 tbsp.	19	55	0.46	13.1
Sugar, brown	1 tbsp.	9	33		8.2
Sugar, granulated	1 tbsp.	14	50		14.0
Sirup, corn, dark	1 tbsp.	25	85		21.2
Sirup, corn, light	1 tbsp.	25	85		21.2

<i>Fat grams</i>	<i>Calcium grams</i>	<i>Phos- phorus grams</i>	<i>Iron milli- grams</i>	<i>Vitamin A international units</i>	<i>Thiamin (Vitamin B₁) micrograms</i>	<i>Ascorbic Acid (Vitamin C) milligrams</i>	<i>Riboflavin (Vitamin G) micrograms</i>
21.5	.0117	.2178	0.9	18-540	+	—	+
22.9	.0315	.3285	1.62		81	—	
0.8	.0940	.1720	1.40		90	—	
11.4	.0340	.2900	1.40		+	—	
16.4	.0756	.1353	1.17	174	36-72		
20.0	.0369	.1806	0.84		++		+
4.9	.0071	.0188	0.60		12-24		++
11.6	.0201	.1185	0.60	108	150-180		60-150
7.9	.011	.067	0.34	61	85-102		34-85
21.1	.0267	.1005	0.78	30-60	45-75		
19.3	.0267	.1074	0.63	30-45	90-180		
0.8	.110	.105	0.96	315-420	12-18		105-210
	.025	.111	1.6	61	150		96
3.0							
11.0							
17.0							
11.0							
11.6	.002	.002	.028	384			
11.6	.0024	.0046	0.60	8			
11.0							
	.001	.006	0.2				
	.0492	.0057	1.38				
	.0080	.0010	0.25				
	.0150	.0025	0.35				
	.0025		0.07				

TABLE OF NUTRITIVE VALUES OF FOODS (CONTINUED)

FOOD	Approximate measure	Weight grams	Cal- ories	Protein grams	Carbo- hydrate grams
Sirup, maple	1 tbsp.	25	72		17.8
Cake, angel	Piece 4½" x 3½"		222	5.5	49.0
Cake, plain	2" cube		159	3.0	27.5
Cake, sponge	Piece 2" x 2¾" x 7/8"	26	100	1.7	
Chocolate, sweet, milk	1 oz.	30	166	2.4	15.3
Chocolate, unsweetened	1 square (1 oz.)	30	183	3.8	9.0
Cocoa, beverage (with milk)	½ cup (scant)	100	92	3.7	9.2
Cocoa, powder	2 tbsp.	15	75	3.2	5.6
Cookies, double chocolate wafers with sugar filling	4 wafers 2" diam.	50	247	2.4	35.7
Cookies, oatmeal	1 thin 2" diam.		69	2.0	12.5
Cookies, sugar	1 thin 2¼" diam.		37	0.5	5.5
Doughnuts	1	45	200	3.0	25.0
Gelatin, plain, unsweetened	1 tbsp.	10	37	9.1	
Ginger ale	½ cup	120	38		9.6
Gingerbread, hot water	2" square		314	6.0	54.5
Ice, orange	4 heaping tbsp.		219		54.5
Jello	2 heaping tbsp.	100	90	2.5	20.0
Pie, apple	3" sector 9" pie	100	272	3.1	42.8
Pie, coconut custard	2" sector 9" pie	100	178	4.2	26.1
Pie, lemon meringue	3" sector	85	300	4.2	
Pie, mince	3" sector	100	286	5.8	38.1
Pudding, bread	3 heaping tbsp.		169	6.0	25.0
Pudding, cornstarch	3 rounded tbsp.		147	3.0	26.0
Pudding, custard	3 heaping tbsp.		196	9.0	21.0
Pudding, tapioca cream	4 heaping tbsp.		185	6.0	27.5
Sherbet, orange	4 heaping tbsp.		268	2.5	58.0
Spanish cream	3 heaping tbsp.		128	5.5	15.5
<i>Miscellaneous</i>					
Olives, green, unstoned	1 large or 2 small	10	30	0.1	1.2
Olives, ripe, unstoned	1 large or 2 small	10	25	0.2	0.4
White sauce, medium	¼ cup		112	2.5	5.5
Yeast, compressed	1 cake	18	20	1.7	2.3
Cod-liver oil	1 tbsp.	11	100		

* Sources: Sherman, H. C., and Lanford, C. S., *Essentials of Nutrition*, The Macmillan Co., 1940. Sherman, H. C., *Chemistry of Food and Nutrition*, The Macmillan Co., 1941. Rose, Mary Swartz, *Feeding the Family*, Fourth Edition, The Macmillan Co., 1940. Chatfield, C., and Adams, G., *Proximate Composition of American Food Materials*. U. S. Department of Agriculture, Circular No. 549, Washington, D. C. Bureau of Home Economics, U. S. Department of Agriculture, unpublished data, Charlotte Chatfield.

<i>Fat grams</i>	<i>Calcium grams</i>	<i>Phos- phorus grams</i>	<i>Iron milli- grams</i>	<i>Vitamin A international units</i>	<i>Thiamin (Vitamin B₁) micrograms</i>	<i>Ascorbic Acid (Vitamin C) milligrams</i>	<i>Riboflavin (Vitamin G) micrograms</i>
	.0270	.0032	0.7				
	.0070	.0220	0.20				
4.0	.0190	.0340	0.30				
	.007	.023	0.30	100	6	2.5	30
10.5	.0270	.134	0.80		20	—	
14.6	.0270	.134	0.80		20	—	
4.5	.1240	.1100	0.3	(200)	40-60	1	(200)
4.3							
10.5							
1.5	.008	.045	0.40				
1.5	.002	.006	0.10				
10.0							
8.0	.088	.054	3.1				
	.010	.007	0.10				
9.8	.0090	.0260	0.40		(20)		(60)
6.3	(.0800)	(.1000)	1.0		30		155
	.018	.048	0.6	273	18	—	81
12.3					+		+
5.0	.126	.122	0.7	+	+		+
3.5	.108	.084	0.20	+	+		+
8.5	.169	.170	1.40	+	+		+
6.0	.128	.125	0.80	+	+		+
2.5	.097	.370	0.30			+	
5.0	.104	.106	0.50	+	+		+
2.7	.0122	.0014	0.29	38			
2.5	.0122	.0014	0.29	34			
8.5	.073	.061	0.20	+	+		+
0.7					49-126	—	108-540
				3585 †			

Stern, Frances, *Applied Dietetics*, Williams and Wilkins Co., 1936. Munsell, Hazel, *Vitamins and Their Occurrence in Foods*, Milbank Memorial Fund *Quarterly*, Volume XVIII, No. 4, October, 1940, pp. 311-344. Ralston Purina Co. (Ry-Krisp, Ralston). Cream of Wheat Corp. (Cream of Wheat). H. J. Heinz Co. (Tomato Soup).

† U.S.P. Standard. For various brands, see container.

APPENDIX II

List of Audio-Visual Aids

The following list of audio-visual aids may be used to supplement some of the material in this book. It is suggested that each film be previewed before using so that the teacher may prepare her class for what is coming. After the showing to the group a discussion is most helpful followed by a reshewing of the same film.

These films can be obtained from the producer or distributor listed with each title. The addresses of producers and distributors are given at the end of this listing. In many cases these films and filmstrips can be obtained from your local film library or local film distributor; also, many universities have large film libraries from which they can be borrowed.

All motion pictures are 16mm., filmstrips are single frame 35mm., which have been coded to indicate producer. Each has been listed once in connection with the chapter to which it is most applicable. However, in many cases the films may be used advantageously in connection with other chapters. The films listed under "background" are excellent family and personal living materials for general content.

Key to Symbols

Min	minutes	C	Color
Si	Silent motion picture	Fs	Filmstrip
Sd	Sound motion picture	Letter grouping indicates distributor	

Background Material

Eighteenth Century Life in Williamsburg (EKC: 44 min: C: sd). Part I, "Home Life," embraces the home, especially the kitchen, in the morning. Part II, "Eighteenth Century Cabinet-Making," shows the work of the shop, the governor's palace. Part III, "Community Life," covers town life and evening at home.

What Price Happiness (NSC: 9 min: sd). Safety in the home, pointing

out the hazards of small rugs, poisons in medicine chest, children around the kitchen range.

Safety in the Home (TNSC: 8 min: sd). Designed to show children safety precautions in the home.

This Too is Sabotage (MTPS: 25 min: sd). Dramatizes the importance of planned menus based on the Basic Seven Food Groups.

Family Affair (AMNH: 20 min: sd). Everyday family relationships.

You and Your Family (YMCA: 8 min: sd). Portrays situations that most families face every day. Poses problems in family relationships and indicates paths leading toward happy family life.

Courtesy Comes to Town (FF: 20 min: sd). An average American family discussing whether the younger or older generation is the more courteous. Both sides give illustrations of courteous actions and finally point out that the most important thing is courtesy itself.

Strange Hunger (MTPS: 33 min: sd). Pictures the need and use of nicotinic acid, riboflavin, thiamin, and other vitamins in the human body.

Unit 1. The Vitamin C Food Family

Citrus in Nutrition (CF: 20 min: C: sd). Illustrating properly selected meals.

Tomatoes, the Vitamin Food of the Nation (AFGI: 10 min: sd). Shows raising tomatoes from seed to harvest; also marketing procedures.

Ever Since Eden (HJH: 30 min: sd). Development of tomatoes told through a series of six episodes.

Canning the Victory Crop (USDA: 22 min: C: sd). How fruits and vegetables are canned, shown by demonstrations. Acid foods by the boiling water bath method; nonacid foods by the pressure canning method.

Yesterday, Today and Tomorrow (HJH: 30 min: sd). History of preservation of foods from the time of Napoleon Bonaparte to the present day.

Unit 2. Hearty Vegetables and Fruits

Story of Dr. Carver (PCW: 11 min: sd). Story of a slave boy who became an outstanding scientist. Discovers new ideas for peanuts.

About Bananas (UFC: 15 min: si). Complete presentation of the banana industry from the clearing of the jungle and the planting to the shipment of the fruit to the American market.

Fundamentals of Diet (EBF: 11 min: sd). Shows the diet of various animals and compares them to man. Gives good examples of food selection.

Washington State Appleland (WSA: 30 min: sd). Production, harvesting, warehousing, and transportation of apples.

Unit 3. Cereal Three Times a Day

Golden Glory (SBI: 32 min: sd). Tells the story of Mark Carleton who was responsible for America's abundant wheat crop. It stresses the importance of eating foods from each of the Basic Seven Food Groups.

Modest Miracle (SBI: 30 min: sd). Dramatic and accurate depiction of the scientific steps leading to the commercial use of vitamins.

Bread (EBF: 11 min: sd). Story of bread from the wheat harvest through the flour mill to a modern bakery.

Bread (SVE: 1 fs). Presents the story of bread giving new methods and ideas for its use.

Unit 4. Milk: the Almost Perfect Food

More Life in Living (NDC: 12 min: sd). Modern machinery in the production and distribution of milk.

The Milk Parade (NDC: 10 min: sd or 15 min si). The value of a balanced diet to health and successful living and the importance of milk and milk products as a basis of a balanced diet.

Milk As You Like It (DCSL: 9 min: C: sd). Shows the manufacture of various kinds of dairy products.

Unit 5. The Food Fats

Principles of Baking (EBF: 11 min: sd). Presents step-by-step process of baking bread, pastries, and cakes. Close-ups show methods of mixing ingredients. The action of one ingredient upon another is explained.

400 Years in Four Minutes (GM: 22½ min: C: sd). Brief history of cake making over the past 400 years. A home economist presents the new Betty Crocker method of making cakes. Covers preliminary preparation, selection of ingredients and utensils, accurate measurements, proper mixing, and correct baking.

Coffee (EKC: 15 min: si). Coffee growing, hulling, cleaning, shipping, and preparing for the market.

Unit 6. The Green and Yellow Family

Principles of Cooking (EBF: 11 min: sd). Emphasizes the fundamental principles of the simple cooking processes of boiling, frying, roasting, and

steam cookery. Each process is illustrated to show how food properties are changed by applying heat in this manner.

Celery from Seed to Store (AFG: 9 min: sd). Shows large scale celery raising from seedling to harvest. Preparation for the market.

Vitamin A, B, C, D (IPC: 20 min: sd). Discussion of the vitamin content of fruits and vegetables.

Fresh from the Garden (IHC: 17 min: C: sd). Covers all phases of vegetable gardening from seed bed preparation to final harvesting and preservation of crops. Instructive for general information on vegetable plant growing.

The Farm Garden (USDA: 20 min: C: sd). What to plant in a home garden, preparation of soil, plant rotation, insect control.

Unit 7. The Protein Foods

How to Cook Meat by Dry Heat (NLS: fs). Shows right and wrong ways of cooking meats by dry heat.

Meat and Romance (NLS: 40 min: sd). Facts about meat: purchase, cooking, carving, serving, and nutritional value. Demonstration of proper cooking methods.

Quicker Than You Think (AC: 22 min: sd). Use of partially prepared meats as main dishes.

The Gentle Art of Meat Cookery (AC: 28 min: sd). Proper methods for cooking popular cuts of meat.

How to Cook Eggs (PEB: fs). Methods and ways of preparing eggs.

Home Cookery of Fish (USDI: 11 min: sd). Shows preparation of broiled halibut, boiled cod, and baked whitefish.

Unit 8. Your Everyday Meals

The Balanced Way (S: 28 min: sd). Discusses the necessity of a well-balanced diet and gives suggestions for planning meals of the right kind.

Crystal Clear (NTPS: 28 min: C: sd). Present-day practices of the ancient art of glassmaking. Shows the making and use of glassware for modern living.

Something You Didn't Eat (USDA: 9 min: C: sd). A Walt Disney cartoon which explains how one may learn to use the Seven Basic Food Groups essential to good nutrition.

Whenever You Eat (NDC: 12 min: C: sd). Shows good food selection, healthful living practices, and the attractiveness of healthy young boys and girls.

Unit 9. The Meal That Gets Itself!

Making Ends Meet (DCSL: 12 min: sd). Demonstrates how inexpensive meals when attractively prepared and served can do much to improve our health and standard of living.

Winning Seals of Approval (MTPS: 20 min: C: sd). Testing laboratory, measuring and recording the necessary basic construction and performance requirements of modern gas ranges.

Unit 10. More Food for Less Money

Distribution of Foods (EBF: 10 min: sd). The technical development and economic problems in the preservation and transportation of foods. Shows how food transportation and preservation have increased possibilities for distributing perishable foods from producer to consumer; the problem of tariffs; and an animated map background shows the intercontinental movement of foods.

Freezing Fruits and Vegetables (USDA: 15 min: C: sd). Shows the process of freezing corn, broccoli, peaches, and strawberries.

Frozen Freshness (FSC: 30 min: sd). Methods and techniques of quick freezing a variety of foods.

40 Billion Enemies (MTPS: 26 min: C: sd). How to preserve food safely by modern refrigeration. Scientific facts about the growth and control of food bacteria.

How to Get the Most Out of Your Refrigerator (FSC: 20 min: sd). Proper care and use of the home refrigerator.

Distributing America's Goods (EBF: 10 min: sd). Shows why it costs as much as it does to distribute American goods. Sequences are devoted to the distribution costs of producer, wholesaler, retailer, and transportation. Shows how distributors and consumers can cooperate to reduce distribution costs.

Unit 11. Food Makes the Party

Dinner Party (SM: 20 min: C: sd). Shows a group of young people having their first dinner party. Develops in a graphic way table manners and etiquette.

You and Your Friends (YMCA: 8 min: sd). A teen-age party shows in action the factors that can make or mar a friendship and good times for all.

How Do You Do (YA: 15 min: sd). Shows acceptable social introductions. The film analyzes situations and repeats them for thorough learning.

Arranging the Dinner Table (SM: 30 min: C: sd). Part I, "Let's Give a

Tea"; proper conduct at teatime; acceptable dress, invitations, guest list, etc. Part II, "Arranging the Buffet Supper." Part III, "Arranging the Tea Table"; both Parts II and III illustrate clearly the reasoning behind attractive and correct table arrangements.

Irish Linen (EN: 21 min: C: sd). Shows the making of linens from the growing of the flax to the finished article. Suggestions as to how to use linens in the home, how to set a table, etc.

DISTRIBUTORS

AFGI	American Fruit Growers, Inc., 1425 S. Racine Ave., Chicago, Ill.
AFG	American Fruit Growers, 2035 Terminal Annex, Los Angeles, Calif.
UFC	United Fruit Company, Education Dept., Pier 3, North River, New York, N. Y.
AMNH	American Museum of Natural History, Central Park, West at 79th St., New York 25, N. Y.
AC	Armour and Company, Chicago, Ill.
YMCA	Associated Films—YMCA, 347 Madison Avenue, New York 17, N. Y.
CF	Castle Films, 30 Rockefeller Plaza, New York 20, N. Y.
DCSL	Dairy Council of St. Louis, St. Louis, Mo.
EKC	Eastman Kodak Co., Teaching Films Division, 343 State St., Rochester 4, N. Y.
EN	Elliott and Nelson, Inc., 24 Wall St., Norwalk, Conn.
EBF	Encyclopaedia Britannica Films, 20 North Wacker Drive, Chicago 6, Ill.
FF	Form Films, 8913 Sunset Blvd., Los Angeles, Calif.
FSC	Frigidaire Sales Corporation, 300 Taylor Street, Dayton 1, Ohio
GM	General Mills, Inc., Home Service Dept., Minneapolis 15, Minn.
HJH	H. J. Heinz Co., Pittsburgh 12, Pa.
IHC	International Harvester Co., 180 N. Michigan Ave., Chicago, Ill.
IPC	Ideal Picture Corp., 28 East Eighth Street, Chicago 5, Ill.
MTPS	Modern Talking Picture Service, 9 Rockefeller Plaza, New York 20, N. Y.
NDC	National Dairy Council, 11 N. Canal Street, Chicago, Ill.
NLS	National Live Stock and Meat Board, 407 S. Dearborn St., Chicago, Ill.
NSC	Newark Safety Council, 24 Branford Place, Newark 2, N. J.
PCW	Pennsylvania College for Women, Film Service, Woodland Road, Pittsburgh 6, Pa.

PEB	Poultry and Egg National Board, 308 W. Washington St., Chicago, Ill.
S	Sealtest, 230 Park Avenue, New York, N. Y.
SM	Simmel-Meservey, 9538 Brighton Way, Beverly Hills, Calif.
SVE	Society For Visual Education, Inc., 100 East Ohio St., Chicago 11, Ill.
SBI	Standard Brands, Inc., 595 Madison Avenue, New York 22, N. Y.
TNSC	The National Safety Council, Inc., 20 Wacker Drive, Chicago 6, Ill.
USDA	United States Department of Agriculture, Washington, D. C.
USDI	United States Department of Interior, Fish and Wild Life Service, Chicago 54, Ill.
WSA	Washington State Apple Advertising Commission, Yakima and Wenatachee, Wash.
YA	Young America Films, Inc., 18 East 41st St., New York 17, N. Y.

INDEX

Index

- A. M. A. Seal, 269, 465
- Apples
baked, 103–104
crisp, 105
Danish dessert, 104–105
fritters, 264
pie, 253–254
roll, 106
sauce, 105
taffy, 534
- Apricots
stewed, 119
upside-down cake, 240–241
- Ascorbic acid, 58–64
- Asparagus
buttered, 278
creamed, 278
- Banana bread, 244–245
- Basic 7 groups, 8–9, 17, 67, 110, 169, 208, 269, 294, 367–372, 482–484
- Bavarian cream, 183, 189–190
- Beans
baked, 93
Boston baked, 96
chili con carne, 93, 98
- Beans, green and yellow
buttered, 278
creamed, 279
- Beef pinwheels, 323
- Beets
buttered, 82
pickled, 82
- Beverages
apricot flip, 177
chocolate milk shake, 177
cocoa, 57
coffee, 245–246
eggnog, 176
fruit drinks, 54–55
hot chocolate, 176
lemonade, 54–55
malted milk, 176–177
tea, hot, 225
tea, iced, 225
- Biscuits
basic recipe, 128
emergency, 130
making, 123
standards, 122–124
troubles, 124
variations, 130
- Boiled tongue, 326
- Bouillon, 329
- Braised lamb or mutton chops, 328
- Braised stuffed heart, 326
- Bread sticks, 85–86, 91
- Breaded chops, 324
- Bread
enriched, 163–165
general procedure, 156
quick pan rolls, 161
refrigerator rolls, 159
roll variations, 156–161
standards, 157–158
straight dough method, 158
yeast, 151–158

- Breads, types of
 - brown, 133
 - hot, 120-142
 - Johnnycake or corn, 133
 - scones, 132
 - spoon, 133-134
 - tea, 243-245
- Breakfast cereals, (*see* cereal foods)
- Breakfasts, 114, 116, 302, 385
- Broccoli, buttered, 279
- Broiled chops and steaks, 337
- Buffet meals, 495-501
- Butter
 - food value, 209
 - grape, 44
 - quality, 211-213
- Buying
 - beans, 92
 - cereals, 113-116
 - chickens, 356-360
 - citrus fruits, 45-47
 - eggs, 299-303
 - fat, 259
 - fish, 346
 - ice cream, 184-186
 - large kitchen equipment, 447-453, 480
 - meat, 314-319, 330-336
 - potatoes, 68-69
 - salad greens, 18-19
 - small kitchen equipment, 446-447, 454-455
 - tomatoes, 18-19
- Buying guides
 - A. M. A. Seal, 465, 469
 - can sizes, 463
 - comparative costs, 461-462
 - labels, 461-464
- Cabbage
 - buttered, 279
 - cole slaw, 29
 - scalloped, 280
- Cakes
 - angel food, 520-521
 - apricot upside-down, 240-241
- Cakes—(*Continued*)
 - basic ingredients, 226-229
 - butter cake troubles, 234-235
 - chocolate cup, 238
 - general directions, 229-233
 - hot milk sponge, 520
 - jelly roll, 521-522
 - lebkuchen, 239
 - praline Christmas, 519-520
 - spice, 238-239
 - standard butter (electric mixer), 237-238
 - standards, 234
 - variations, 236-237
 - yellow butter, 237
- Calcium, 172
- Calories
 - daily allowances, 102
 - definition, 103
 - in butter and margarine, 209
 - in fruits and vegetables, 62-63, 75-76
 - requirements, 103
- Candied orange or grapefruit peel, 537
- Candy, 511
 - fudge, 531
 - molasses bars, 531
 - peanut brittle, 531
 - peanut butter pinwheels, 531, 534
 - pralines, 535
- Canning, 33-46
 - tomatoes, 34-40
- Carbohydrates, 111, 170
- Carrots
 - and celery curls, 281
 - buttered, 280
- Carving, 394, 395
- Casserole dishes, (*see* one-dish meals)
- Cauliflower, buttered, 281
- Centerpieces, 397-398, 494, 500
- Cereal foods, 111-134
 - buying, 113-116
 - care and storage of breakfast foods, 117-118
 - cooked breakfast cereals, 118-119
 - griddle cakes, 136-138
 - hot breads, 120-142

Cereal foods—(*Continued*)

macaroni products, 143–146
yeast bread, 151–158

Cheese, 195–204

and frozen-fruit salad, 196–198, 200–201
and fruit dessert, 196–198
and pineapple salad, 203–204
custard and cream peas, 202
fondue, 199
grilled sandwich, 200
kinds, 195–196
main dishes, 197
rarebit, 201
salads, 196
sauce, 201
straws, 256
stuffed frankfurters, 203

Cherry delight, 55

Cherry pie, 254

Chicken, 356–363

à la king, 361–362
care of, 358
gravy, 516–517
methods of cooking, 358–359
pan fried, 361–362
paprika, 363
roast, 514–516
salad, 29
selection of, 356–360
soup, 363
stewed, 360
stuffing, 516

Chili con carne, 93, 98

China, 406–409

Chocolate pudding, 188

Chowder

creamy corn, 290
fish, 355

Cinnamon fluff, 243–244

Cinnamon toast, 56–57

Citrus fruits

preparation of, 47–50
selection of, 45–47
uses, 45

Cleaning

center, 434–435, 437, 439

Cleaning—(*Continued*)

kitchen and dining room, 434–435
range, 432–433

Cobbler, fruit, 256

Cocoa, 57

Cole slaw, 29

Combination salad, 21, 31

Conservation, 471–482

drying foods, 473, 479
leftovers, 470–473
quick freezing, 476–482
storage of canned foods, 473

Consommé, 330

Cooked salad dressing, 26–27

Cookies, 214–224

basic ingredients, 214–216
brownies, 224
Christmas, 511
cocoanut dainties, 505
drop, 220–221
filled, 222
fruit, 218–219
ginger snaps, 224
lemon drops, 219–220
molasses oatmeal, 218
refrigerator, 221
sugar, 221–223
tasty tea snacks, 504
techniques, 216–217
Toll House, 220

Cottage pudding, 240

Corn

bread, 133
fresh cut, 281
on cob, 281
pudding, 82–83

Covers, (*see* setting the table)

Cranberry

relish, 518
sauce or jelly, 518
steamed pudding, 517–518

Cream filling, 522–523

Cream puffs, 505–506

Croutons, 85–86, 91

Crunch ring, 191

Cupboards, 443–493

- Custard
 - baked, 179–180, 188
 - blanc mange, 182
 - rennet, 181–182, 189
 - soft, 188–189
 - standards, 180, 182
 - variations, 180–181

- Date-and-nut bread, 244
- Date-and-nut torte, 518–519
- Date bread, 244
- Dates, stuffed, 535
- Deep-fat frying, 258–265
 - care of fat, 261–262
 - corn fritters, 263
 - croquettes, 263–264
 - doughnuts, 264–265
 - French fried potatoes, 265
 - general procedure, 259–261
 - selection of fat, 259
 - standards of fried foods, 263
- Desserts
 - broiled grapefruit, 53
 - cakes, 226–243
 - cobblers, 256
 - cookies, 214–224
 - fruit cup, 53–54
 - gelatin, 55–56
 - ices and sherbets, 193–194
 - ice creams, 191–193
 - milk, 178–195
 - pies, 246–258
 - puddings, 147–148, 240
- Diet, (*see* nutrition)
 - balanced, 482–484
 - convalescent, 383–384
 - toddler's, 381
- Dining rooms, 404–416
 - breakfast nook, 412
 - cleaning, 434–435
 - combined with living room, 413
 - five-purpose, 412–413
 - for little people, 414–416
 - in temporary quarters, 415–416
 - types, 404–407
- Dishwashing, 422–423

- Doughnuts, 264–265
- Dumplings (for stew), 345

- Efficiency, (*see* management)
- Eggs, 299–311
 - à la goldenrod, 308–309
 - à la king, 310
 - baked, 307
 - Benedictine, 308
 - deviled, 306
 - fried, 307
 - hard-cooked, 306
 - nutritive values, 296–297
 - plain omelet, 307
 - poached, 305
 - salad sandwich, 309–310
 - scrambled, 306–307
 - selection of, 299–303
 - soft-cooked, 305–306
 - uses in food preparation, 304
- Electric equipment, 433, 436, 447–453
- Energy requirements, 100–103
- Entertaining, (*see* parties)

- Family living
 - affected by work habits, 421–445
 - and the balanced diet, 367–368
 - and entertaining, 455, 488–506
 - at meal times, 367–404
 - budget, 459–484
 - dinner parties, 506–514
 - equipment for better, 446–455
 - importance of, 2–6
 - in dining room, 404–416
 - in the home kitchen, 95, 172, 229
- Fats, 208–268
- Federal Food, Drug, and Cosmetic Act, 113, 461, 467
- Figs, stuffed, 535
- Fish, 346–355
 - baked, stuffed, 352
 - care of, 347
 - chowder, 355
 - codfish balls, 353
 - cookery, 349

Fish—(*Continued*)

- creamed tuna, 350–351
 - croquettes, 353–354
 - fillets, oven fried, 350
 - kinds of, 348
 - pan fried, 350
 - quick salmon pie, 351
 - salad, 29
 - salmon loaf, 352–353
 - selection of, 346
 - steamed halibut, 353
- Flour, 152–155
- enriched, 163–165
- Food habits, 8, 17, 67, 110, 169, 172–173, 208, 269, 294, 367–372
- Food values, (*see* nutritive values)
- Frankfurters
- boiled, 328–329
 - pan-fried, 342
 - stuffed, 203
- Freezing, quick, 476–482
- French dressing, 22–23
- French toast, 142

Fritters

- apple, 264
- corn, 263

Frostings

- butter cream, 241
- chocolate cream, 242
- cocoa, 242
- confectioner's, 241
- magic (electric mixer), 242–243
- mocha, 242
- orange cream, 241

Fruit

- baked whip, 105–106
- cobbler, 256
- cup, 53–54
- drinks, 54–55
- food values, 62
- stewed apricots, 119
- stewed prunes, 119
- uncooked whip, 106

Gelatin dishes

- cherry delight, 55

Gelatin dishes—(*Continued*)

- cubes and soft custard, 532
- lemon jelly, 55–56
- molded-fruit salad, 55
- salad, 50
- tomato aspic, 56

Gingerbread, 243

Glassware, 410

Gluten, 152–155

Grade labeling, 467–469

Grape

- butter, 44
- jelly, 41
- juice, 41

Grapefruit

- avocado salad, 52
- broiled, 53
- halves, 52
- salad, 50–51

Griddle cakes, 135–138, 140

- making, 140
- potato, 140
- standards, 138

Halloween supper, 536–537

Ham

- baked slice, 339
- loaf, 339

Hamburgers, 322–323

Home freezer, 480

Home projects, 16

Home safety, (*see* safety rules)

Homemaking, 3–6

Hot cakes, 135–138

Ice, fruit (freezer), 193

Ice cream, 183–186

- buying, 184–186
- chocolate (refrigerator), 193
- fruit (freezer), 192
- making at home, 186
- standards, 187
- vanilla (freezer), 191–192

Iron, 111, 163

Jars for canning, 35, 37
Jelly roll and ice cream dessert, 532

Kitchens

cleaning, 434-435
cupboards, 439-443
equipment, 446-451
good arrangement, 435-445
types, 436-437, 444-445

Labels, 461-470

Laboratory

management, 12
techniques, 12-15

Lamb casserole, 343

Leftovers

chicken or turkey soup, 363
conservation, 470-473
meats, 343-345
muffins, rolls or biscuits, 57
pastry, 251
stew, 344

Legumes, 92-98

Lemonade, 54-55

Lima beans

buttered or creamed, 82

Lunch

box, 16, 376-378
cafeteria, 378-379

Luncheons, 495-501

Macaroni

and cheese, 148-149
food value, 143-145
soufflé with mushroom sauce, 149-150

Margarine

food value, 209
manufacture of, 209-210
restrictive laws, 210-211

Mayonnaise, 24-25

Meal planning

attractive combinations, 274-275,
374-375, 536

Meal planning—(*Continued*)

economical, 483
for babies and toddlers, 380-382
for older people, 382
for the sick, 382-384
Halloween supper, 536
harvest supper, 285
patterns for, 373-385
soup supper, 97

Meal preparation

efficient planning, 424-428
time saving, 426-428

Measurements in cooking, 12-13

Meat, 311-345

baked ham slice, 339
baked hash, 343
beef pinwheels, 323
boiled frankfurters, 328-329
boiled tongue, 326
braised lamb or mutton chops, 328
braised stuffed heart, 326
breaded chops, 324
broiled lamb chops, 337
broiled steak, 337
broiling, 336
chow mein, 345
dry-heat cookery, 333-336
ham à la Perry, 344
ham loaf, 339
lamb casserole, 343
lamb patties, 341
less-tender cuts, 311-330
moist heat cookery, 313-314, 319-322
pan-broiled bacon, 387
pan-broiled steak, 337
pan-broiled liver and bacon, 341
pan-fried frankfurters, 342
roast pork, 338
roast stuffed shoulder of lamb, 342
roasting, 336-337
selection of, 314-319
Shepherd's pie, 343-344
standards, 322
stew, 325
stew (leftover meat), 344
Swiss steak, 323-324

- Meat—(*Continued*)
 - Swiss veal steak, 327
 - tender cuts, 330–336
- Meat and spaghetti, 150
- Meat loaf, 322
- Meat stock, 288
- Milk, 196–207
 - calcium in, 172
 - daily requirements, 172–173
 - desserts, 178–195
 - food values in, 170–173
 - irradiated, 172
 - malted, 176–177
 - shake, 177
 - vitamin D, 172
- Motion study, 420–424
- Mousse, vanilla, 190
- Muffins, 125–128
 - basic recipe, 131
 - difficulties in making, 126
 - making, 126–128
 - standards, 126
 - variations in, 131–132
- Mush
 - making, 119
 - sautéed, 139–140

- Niacin, 111, 163
- Noodle ring, 150–151
- Nutritive values
 - balanced diet, 482–484
 - butter and margarine, 209–213
 - B vitamins, 111–113
 - calories, 62–63, 75–76
 - dried beans and peas, 92
 - eggs, 296–297
 - energy in vegetables, 99
 - fish, 298
 - green and yellow vegetables, 269–275
 - hot breads, 121–122
 - importance, 3–8
 - macaroni, 143–144
 - meat, 297
 - milk, 170–173
 - poultry, 298
- Nutritive values—(*Continued*)
 - rice, 143–146
 - vitamin C, 17, 58–64
- Nuts, salted, 535–536

- Oleomargarine, (*see* margarine)
- One-dish meals
 - chow mein, 345
 - macaroni and cheese, 148–149
 - macaroni soufflé, 149–150
 - meat and spaghetti, 150
 - quick salmon pie, 351
 - Shepherd's pie, 343–344
 - Spanish rice, 148
- Onions
 - au gratin, 282
 - buttered, 282
 - creamed, 282
- Oranges
 - halves, 52
 - salad, 50–51
- Organization of class work, 8, 10–15
- Oven meals, 428
- Oyster stew, 355

- Parfait, cranberry (refrigerator), 194
- Parties
 - buffet meals, 495–501
 - formal tea, 492–495
 - Halloween, 523–524
 - impromptu, 524–526
 - informal tea, 489–492
 - planning, 488–489, 514
- Pastry
 - basic ingredients of, 247
 - cheese straws, 256
 - cinnamon sticks, 257
 - hot-water, 253
 - methods of mixing, 247–249, 252
 - plain, 251
- Peas, buttered or creamed, 82
- Pears
 - baked, 529–530
 - salad, 533
 - turnovers, 257–258

- Picnics, 526–528
- Pies, 247–258
 - apple, 253
 - Boston cream, 522
 - cherry, 254
 - cream pie, 255–256
 - lemon chiffon, 255
 - pumpkin, 254
 - standard, 250–251
 - Streusel topping, 253–254
 - variations, 251
- Popcorn
 - balls, 534
 - buttered, 534
- Potatoes
 - baked, 70–71
 - boiled, 69–71
 - cakes, 80
 - candied sweet, 80
 - creamed, 73–74, 77–78
 - French fried, 265
 - hash-browned, 78
 - mashed, 70–71
 - oven-browned, 80
 - pancakes, 140
 - salad, 78
 - scalloped, 73–74, 76–77
 - scalloped sweet and apples, 81
 - selection of, 68–69
 - standards, 75
 - stuffed, 72–73
- Protein
 - foods, 295–296
 - in milk, 170
- Prunes, stewed, 119
- Punch
 - fruit, 530–531
 - Sidney's, 530
- Quick breads, 120–142
 - banana, 244–245
 - biscuits, 122–124
 - brown, 133
 - corn, 133
 - food value of, 121–122
 - kinds, 121
- Quick breads—(*Continued*)
 - muffins, 125–128
 - scones, 132
 - spoon, 133–134
 - standards, 122–124
- Quick freezing, 476–482
- Range
 - center, 438
 - cleaning, 432–433
- Refrigerator rolls, 159–161
- Riboflavin, 111, 163
- Rice, 145–146
 - boiled, 147
 - puddings, 147–148
 - Spanish, 148
- Rolls, (*see* bread, yeast)
- Safety rules, 14–15, 20, 35–36, 48, 75, 122, 126, 180, 260–262, 320, 381, 448
- Salad
 - accompaniments for, 28
 - cheese and pineapple, 203–204
 - chicken, 29
 - cole slaw, 29
 - combination, 21, 31
 - fish, 29
 - fresh fruit, 51
 - frozen fruit, 199
 - gelatin, 50
 - grapefruit and avocado, 51–52
 - grapefruit, raisins, and cheese, 533
 - greens, 18–19
 - guess what, 528–529
 - kinds and uses, 18
 - molded-fruit, 55
 - orange and grapefruit, 50–51
 - pear, 533
 - potato, 79
 - preparation of, 20–21, 28
 - summer platter, 30
 - tomato, 29
 - tossed-vegetable, 280

- Salad dressing, 19–28
 - cooked, 26–27
 - cream, 31
 - French, 22–23
 - fruit, 31
 - mayonnaise, 24–25
 - variations, 23, 25, 27
- Salmon loaf, 252–253
- Sandwiches
 - bread and butter, 31
 - egg salad, 309–310
 - filling for, 501–502
 - grilled-cheese, 200
 - lucky seven, 362–363
 - spread, 504
 - tea, 503–504
- Sauces
 - barbecue, 329
 - brown-sugar lemon, 256
 - caramel, 191
 - cheese, 199
 - chocolate, 191
 - creole, 354
 - egg, 354
 - foamy, 240
 - for green beans, 278–279
 - Hollandaise, 286
 - lemon-butter, 354
 - lemon-cream, 530
 - mock Hollandaise, 286
 - mushroom, 149–150
 - tomato, 338–339
 - tartar, 354
- School lunch, 16, 376–379
- Scones, 132
- Semiprepared foods
 - milk desserts, 183
 - quick breads, 128
 - soups, 289
- Serving, 393–396
 - center, 439
 - duties of host and hostess, 396–397
 - general rules, 386–396
 - soup, 86–87
- Setting the table, 386–395
 - centerpieces, 397–398
 - cover for salad luncheon, 28
- Setting the table—(*Continued*)
 - rules for individual covers, 388–393
 - saving time, 421–422
- Sherbet, 193–194
- Silver table, 405–406
- Simplification of work, 425–430
- Sirup
 - chocolate, 175–176
 - brown-sugar, 141
- Soufflé crackers, 90
- Soup
 - basic recipe for creamed, 84–85
 - bouillon, 329
 - chicken or turkey, 363
 - consommé, 330
 - cream of corn, 88–89
 - cream of potato, 96
 - cream of tomato, 89
 - creamy corn chowder, 290
 - fish chowder, 355
 - general directions for stock, 288
 - oyster stew, 355
 - purée of green pea, 90
 - soup supper, 97
 - split pea, 96
 - standards, 88
 - types of, 287
 - use of canned, 289
 - variations in vegetable, 288–289
 - vegetable, 291
- Soybeans, 94
 - chili con carne, 95
 - salted, 95–96
- Spaghetti
 - and meat casserole, 150
 - food values in, 143–144
- Spanish cream, 187
- Spinach
 - buttered, 282
 - cream, 282–283
 - soufflé, 283
- Spoon bread, 133–134
- Squash
 - acorn, baked, 283
 - summer, buttered, 284
 - winter, baked, 284

Standards for food preparation

- biscuits, 122–124
- braised meats and stews, 322
- butter cakes, 234
- cookies, 217–218
- cream soups, 88
- fried foods, 263
- griddle cakes, 138
- ice cream, 187
- muffins, 126
- pies, 250–251
- potatoes, 75
- salads, 28
- waffles, 139
- yeast bread, 157–158

Steamed brown bread, 133

Strawberries, freezing, 476–477

Succotash, 81

Sugar plum tree, 510–511

Summaries of food study

- buying, 485–486
- cereal foods, 165–166
- everyday meals, 416–417
- food fats, 266–267
- green and yellow vegetables, 292
- hearty vegetables and fruits, 107
- management, 452, 457
- milk, 204
- parties, 538
- protein foods, 364
- vitamin C foods, 65

Swiss steak, 323–324

Swiss veal steak, 327

Table decorations, 397–398, 408–409

Table linen, 410–412, 492, 495, 500

Table manners, 87–88, 399–403

Table setting, (*see* setting the table)

Tables

- buying guides for chicken, 359
- can sizes, 463
- canning, 42–43
- cooking cereals, 119
- daily allowance of calories, 102
- food values in fruits and vegetables, 62–63

Tables—(*Continued*)

- nutritive values of foods, 542–555
- oven temperatures, 129
- sugar sirups for canning and freezing, 481
- temperatures for deep-fat frying, 260–261
- times and temperatures for baking, 129
- times for canning nonacid vegetables, 474, 475
- times for cooking dried legumes, 94
- times for cooking vegetables, 79
- times for roasting meat, 340–341

Tapioca cream, 189

Tasty tea snacks, 504

Teas, 489–495

- formal, 492–495
- informal, 489–492
- invitations, 490, 493
- plans, 489
- tables, 491–493

Tea breads

- banana, 244–245
- cinnamon fluff, 243–244
- date, 244
- date-and-nut, 244
- gingerbread, 243

Tests on food study

- cereal foods, 166–168
- everyday meals, 417–419
- food buying problems, 485–486
- food fats and uses, 266–268
- food management, 456–457
- green and yellow vegetables, 292–293
- milk, 205–206
- protein foods, 365–366
- starchy vegetables, 107–109
- vitamin C foods, 65–66

Thiamin, 111, 163

Time saving, 420–458

- techniques, 430–435

Toast, 56

- cinnamon, 56–57

- French, 142

Toasted muffins, rolls, or biscuits, 57

Turnips, buttered, 284–285

Tomatoes

- aspic, 56
- baked halves, 32
- baked stuffed, 32
- canning, 34–40
- juice, 36–40
- salad, 21
- sauce, 338–339
- scalloped, 33
- stuffed, 29–30

Vegetables

- caring for, 274
- food values in, 62–63
- general directions for cooking, 276–277
- green and yellow, 269–293
- raw for salads and appetizers, 275–276

Vegetables—(*Continued*)

- tossed salad, 280

Vitamin

- A, 209, 269, 275
- B group, 111–113, 171
- C foods, 17–66, 269–275
- D, 172, 209
- in canned vegetables, 273
- in fruits and vegetables, 62–63
- loss in food preparation, 271–273

Waffles, 138–139, 141

Walnuts, sugared, 535

White sauce, 73–74

Work centers

- dining rooms, 412–413
- kitchen, 438–439, 442

Yeast, 155–156

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